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THE BRICKBVILDER

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H. F. B.

THE BRICKBUILDER.

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RESPONSIBILITY OF THE ARCHITECT.

IN a previous number we made some comment on the competition for the Atlanta Masonic Building. We have since then had occasion to notice some decisions, which have been made by courts, confirming the principle of the owner's liability if he fails to select a competent architect. Many property owners seem to feel that if an architect is employed he can be held responsible for what happens, no matter whether he is fitted to practise his profession or not. This view is not, we are happy to say, sustained by the courts, which have recognized the architect primarily as an adviser, and have decided that if an owner is not wise enough to pick out a good adviser, he has no one but himself to blame when the results of the advice, which he so obtained, are not satisfactory. Decisions of this kind decidedly make for good architecture. There are plenty of standards by which the most uninitiated layman can make at least a fair selection of an architect. Personal honesty and business ability are qualities which are very speedily manifested, and can very quickly form a part of an architect's current reputation. His artistic ability can be measured by what he has actually done, and if a prospective client chooses to be guided chiefly by whether an architect is a hail-fellow-well-met, or will work cheap, he deserves to get in trouble, and generally does.

THE English-Portland cement held a high place in public favor for many years, and there were some constructors who used to claim that it was not possible to manufacture really first-class Portland anywhere except in England. But a protective tariff and large opportunities have changed all that. The English article has almost gone out of the market, and German cements have very largely taken its place, but these in turn are being supplanted by our own manufacture. It was not so very long ago that reliable American-Portland Cement was almost unknown. The early brands were unevenly mixed and badly ground, while the limited sales left small margin for experimental development, but persistence and constant improvement was sure to win out, though it has required both faith and works on the part of our manufacturers and investors. At present an immense amount of capital is applied in this line in the United States, and the quality of the product is such as to rank with the best of the foreign output, the American Portlands being given first choice by many of our best constructors and architects. The continued use of the German cements is, we believe, largely due to the fact that the output of the American mills is limited and cannot yet fully supply the enormously increasing yearly demand, a condition which is, however, fast changing for the better.

But it can by no means be inferred that all American Portlands are of equal quality. To the popular mind, the term "Portland" as applied to cement carries with it the idea of something which is supposed to be above suspicion, and advantage of this has been taken by some unscrupulous manufacturers to put out a product which they dubb American Portland, and which, somehow, seems to find a ready sale on the strength of its name, though its quality is so poor that it would not be passed by any sort of test, and it is far below the average of the poorest of the foreign cements. The mere name of Portland is no longer in any sense a guarantee of quality, and with this, as with nearly every largely used building material, the safest course is to confine the selection to a few of the well-known and thoroughly tested and accepted cements.

Concrete, when properly prepared, is a most excellent building material, upon which great reliance can be placed, but as it is always mixed in place, and the work generally done by workmen who are more or less indifferent to the results, if not entirely ignorant of them, it is a composition which varies a great deal, and it is not wise to assume that an inferior cement can be so manipulated in the mixing as to compare a moment with the highest grades. There are far too few actual tests made right on the works to justify any experimenting with doubtful brands.

"THE BRICKBUILDER" COMPETITION. IV.
A CREMATORY.

PROGRAM.

THE crematory may be located either on flat or mountainous ground, or a rising slope with wooded background. All of the construction is to be such as is adapted to materials in burnt clay. The cost is not limited.

The function of the building is threefold: First, for the purpose of incineration; second, for the accommodation of those persons desirous of taking part in or witnessing ceremonies in connection with the incineration; third, for the preservation and display of commemorative tablets, monuments, etc., and of urns or vessels containing the ashes for incineration. The different parts of the design may be combined in one building, or grouped and connected with colonnades, etc.

The design should include the following features: —

CHAPEL, in which religious ceremonies may take place, should have pulpit; also catafalque where body may rest while the service is said; also organ and singing gallery or a chancel, and choir room and robing room for clergy. The chapel should seat at least five hundred people. RECEPTION ROOM for relatives and friends should be near the entrance to chapel, and have connected with it the following rooms: Office for registration, administration offices for trustees, toilet rooms. The incinerating department should be in direct communication with the chapel, and contain the following features: — RECEPTION ROOM for the preparation of the body, connected directly with the chapel and with the incinerating process by tramway; lift, or other apparatus to convey the coffin to chapel and incineration chamber. PHARMACY for restoratives, connected with above room. INCINERATING CHAMBER in direct communication with the chapel and with the furnace or other apparatus for generating the incinerating force, possibly directly beneath the chapel. ROOM for furnace or other incinerating apparatus, with accessory rooms for storage of oil, wood, distilled wood, material for liquid air, etc. ROOM provided with glasses in the wall, through which the relatives may view the incinerating process. VENTILATING CHIMNEY, if furnaces are used. LIVING ROOMS for attendants. COLUMBARIUM arranged with alcoves and balconies to multiply the surfaces for niches in which to place the ashes and urns.

DRAWINGS REQUIRED: A perspective sketch and sketch plans, showing the disposition of all the required rooms. To be rendered in black ink, without wash, upon a sheet measuring 15½ by 10 ins. Each drawing is to be signed by a *nom de plume* or device, and accompanying the same is to be a sealed envelope with the *nom de plume* on the exterior, and containing the true name and address of the contestant.

The drawings are to be delivered, flat, at the office of THE BRICKBUILDER, 85 Water Street, Boston, on or before Oct. 1, 1900. For the three designs placed first, THE BRICKBUILDER offers prizes of twenty-five, fifteen, and ten dollars, respectively. All premiated drawings are to become the property of THE BRICKBUILDER, and the right is reserved to publish any and all drawings submitted. Mr. John W. Case, Detroit, Mich., has kindly consented to judge and criticize this competition.

VIEW ON THE ROAD FROM SALERNO TO AMALFI, ITALY.

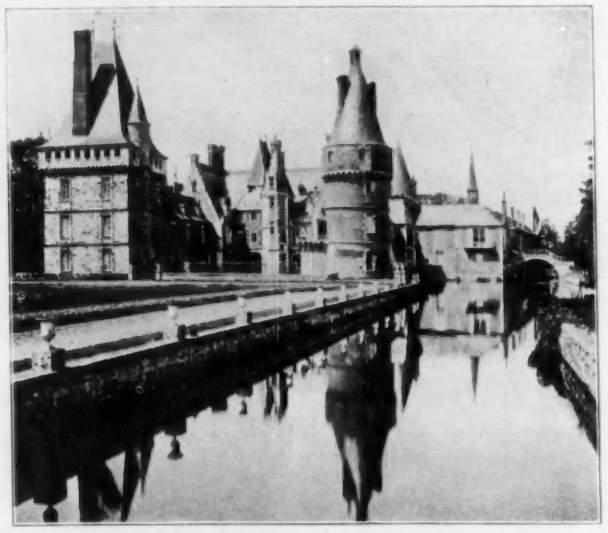
THE northern shores of the Gulf of Salerno, though less extensively visited by tourists than those of the Bay of Naples, are even superior to the latter in scenic grandeur. The high range of mountains which forms the Peninsula of Sorrento rises thousands of feet directly from the sea, sheltering in its crevices numerous maritime villages which, inaccessible by railway and in some instances by vehicles, preserve their mediæval characteristics intact. A good carriage road reaches from Salerno to Amalfi, beyond which it has been found impracticable to construct a permanent way, such portions of the road as have been built having been repeatedly destroyed by landslides, among which the disastrous one of last year is probably still fresh in our reader's memory. The view presented in our frontispiece is of Vietri, a small place on the road near Salerno, where the more savage portion of the scenery has hardly begun, and where level spots may still be found which are planted with lemons, olives, and vines. From the southern exposure of this coast it was particularly open to the ravages of the Barbary pirates, who made frequent and sudden raids, plundering the towns and carrying off the inhabitants as slaves. For defense against these pirates, the viceroys under Charles V. of Spain, under whose dominion the kingdom of Naples fell, erected a series of massive, square watch-towers at close intervals along the coast, one of which, with its corbelled and machicolated battlements, is seen on the beach in the center of the picture.

The outside walls of the houses are generally plastered a dazzling white, and the towers and domes of the churches often have a curious decoration of glazed and colored tiles. The Saracenic influence is strong in the architecture; and in the churches and cloisters of the monasteries are many examples of intricately wrought capitals and bronze and mosaic work. J. Addington Simonds, in his "Sketches in Italy," describes the scenery about Vietri as follows: "On first quitting Vietri, Salerno is left low down upon the seashore, nestling into a little corner of the bay which bears its name, and backed up by gigantic mountains. . . . On the left hand hangs the cliff above the deep salt water, with here and there a fig tree spreading fanlike leaves against the blue beneath. On the right rises the hillside, clothed with myrtle, lentisk, cistus, and pale yellow coronella, a tangle as sweet with scent as it is gay with blossom. . . . Meanwhile each turn in the road brings some change of scene: now a village with its little beach of gray sand, lapped by clearest sea waves, where bare-legged fishermen mend their nets and naked boys bask like lizards in the sun; now towering bastions of weird rock, broken into spires and pinnacles like those of Skye, and colored with bright hues of red and orange; then a ravine, where the thin thread of a mountain streamlet seems to hang suspended upon ferny ledges in the limestone — or a precipice, defined in profile against sea and sky, with a lad, half dressed in goatskin, dangling his legs into vacuity and singing — or a tract of cultivation, where the orange, apricot, and lemon trees nestle together upon terraces with intermingled pergolas of vines."

Brickwork of the Royal Chateaux of France. II.

BY WILLIAM T. PARTRIDGE.

THE Château de Maintenon, situated in a level country near the bank of the river Eure, depended for defense upon the strength of its towers and the depth of its moat. It therefore lacks the picturesque setting of Gien or Blois, both of which crown elevations. It gains



CHATEAU DE MAINTENON.

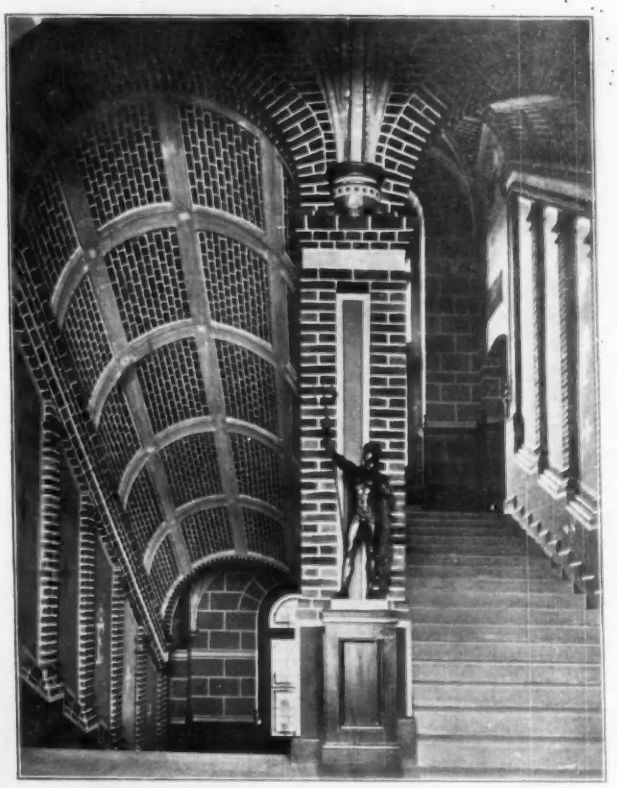
in effect, however, from the wide encircling moat, upon the surface of which its medley of towers is reflected.

Two great sentinel masses stand one on each side of the garden front. Between them lies the brick addition made by Louis XII. So many further alterations were carried out by Louis XIV. that it is not easy to determine the exact extent of the work of the Gothic king. But what he constructed is much in the style of his work at Blois, though it is uncertain which château is the earlier. For example, Louis XII., in making this present change, left the principal towers and a small fragment of the wall uniting them, — here, as at Blois, merely joining older parts by a wing. A chapel is at one end of the wing, and a staircase cage in the middle.

FACADE, CHATEAU DE SAINT-GERMAIN-EN-LAYE.

The material used, of course, is brick. There is some attempt at a diaper pattern; but the wall surface is too small for much display. The composition, controlled by the existing conditions, is very irregular. These conditions led to a picturesque treatment, which has been somewhat marred for us by the barn-like addition of Louis XIV.

With the Château de St.-Germain-en-Laye a new use of brickwork began. During the Gothic period brick was used for constructional purposes only. That is, the body of the wall was built of brick; the contrast of its color with that of the stone was merely accidental. Ornamental effects were obtained by patterns formed of bricks of different colors. But in St.-Germain-en-Laye the *color* of the brick is utilized. All architectural effects are

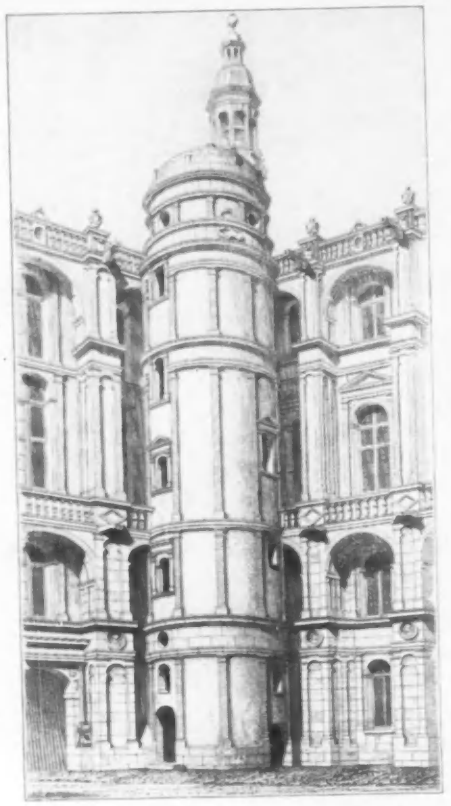


STAIRCASE, CHATEAU DE SAINT-GERMAIN-EN-LAYE.

worked out from this point of view. The body of the building is covered in great part with stucco, — another innovation. Against this light background stand reveals, pilasters, and string-courses of red brick, carried in narrow lines and used purely decoratively.

The composition of this building, built later than Blois, is a step in advance of the north façade of Francis I. in that château.

At Blois the recessed balconies are more or less regularly spaced in a thick wall, and have no relation to the court façade. The piers vary in width and are merely fragments of wall surface. At St.-Germain-en-Laye, on the other hand, these piers are structural, buttressing a large vaulted roof. The windows are deeply recessed, allowing space for balconies at the principal floor level.



SMALL STAIRCASE IN COURTYARD, SAINT-GERMAIN-EN-LAYE.

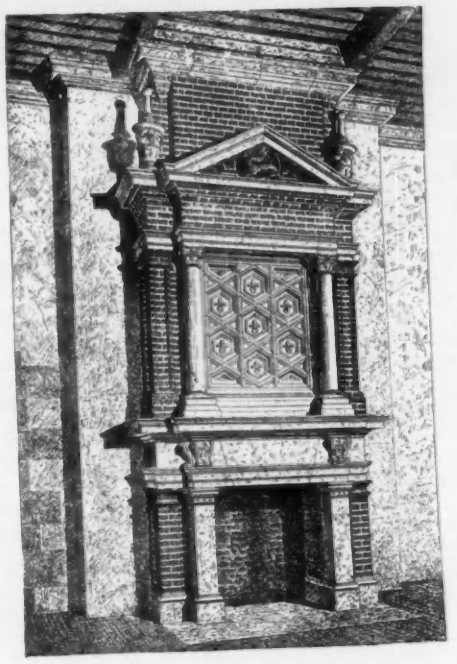
This same treatment of buttressing piers and recessed windows appears in the courtyard, making the building a series of bays nearly alike from the exterior and from within the court.

In the internal angles of the courtyard, formed by the four wings so constructed, are circular staircases. On the exterior the modern restorer has terminated the façade with square, projecting pavilions. The piers on the exterior are carried down to a base, which is readily seen to be the lower part of an old *château fort*, with its machicolation, buttresses, and drawbridge still extant. On this exterior the difference in thickness between the lower fortress wall and its superstructure enables a continuous gallery to run across the principal or garden façade.

The cornices and sides of the characteristic buttresses are ornamented with narrow brick pilasters with molded caps and bases. The buttresses are joined at the top by arches not quite their full depth. By this arrangement all the vertical pilasters can extend to the cornice without interruption by the impost of the arch. The pilasters are coupled by a small arch, also of brick, flush with their faces, making a kind of small arcade applied to the pier. The window pilasters and pediments are of molded brick, and quite thin. The whole effect is that of a late Gothic building.

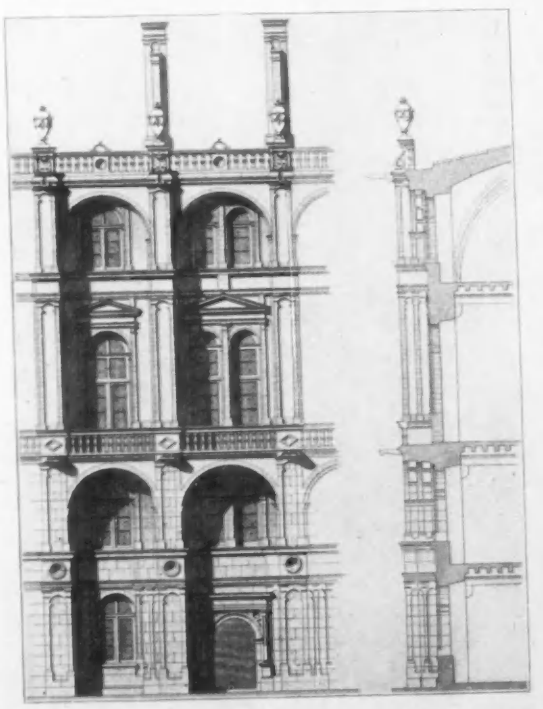
The flat roof — the only one, by the way, in a building of this period — gives small opportunity for ornamental chimney tops. Therefore, those here are practical rather than decorative.

The interior mantel and the hoods over the fireplace are interesting. They are built entirely of brick, excepting a single Gothic example at Rouen, the only instances of such construction generally known to have existed at this period. The high specimen in the Grand Room gains added distinction from its importance in the application of the Orders. The panels of the vaults and the pilasters of the staircase are of brick.



CHIMNEYPIECE, CHATEAU DE SAINT-GERMAIN-EN-LAYE.

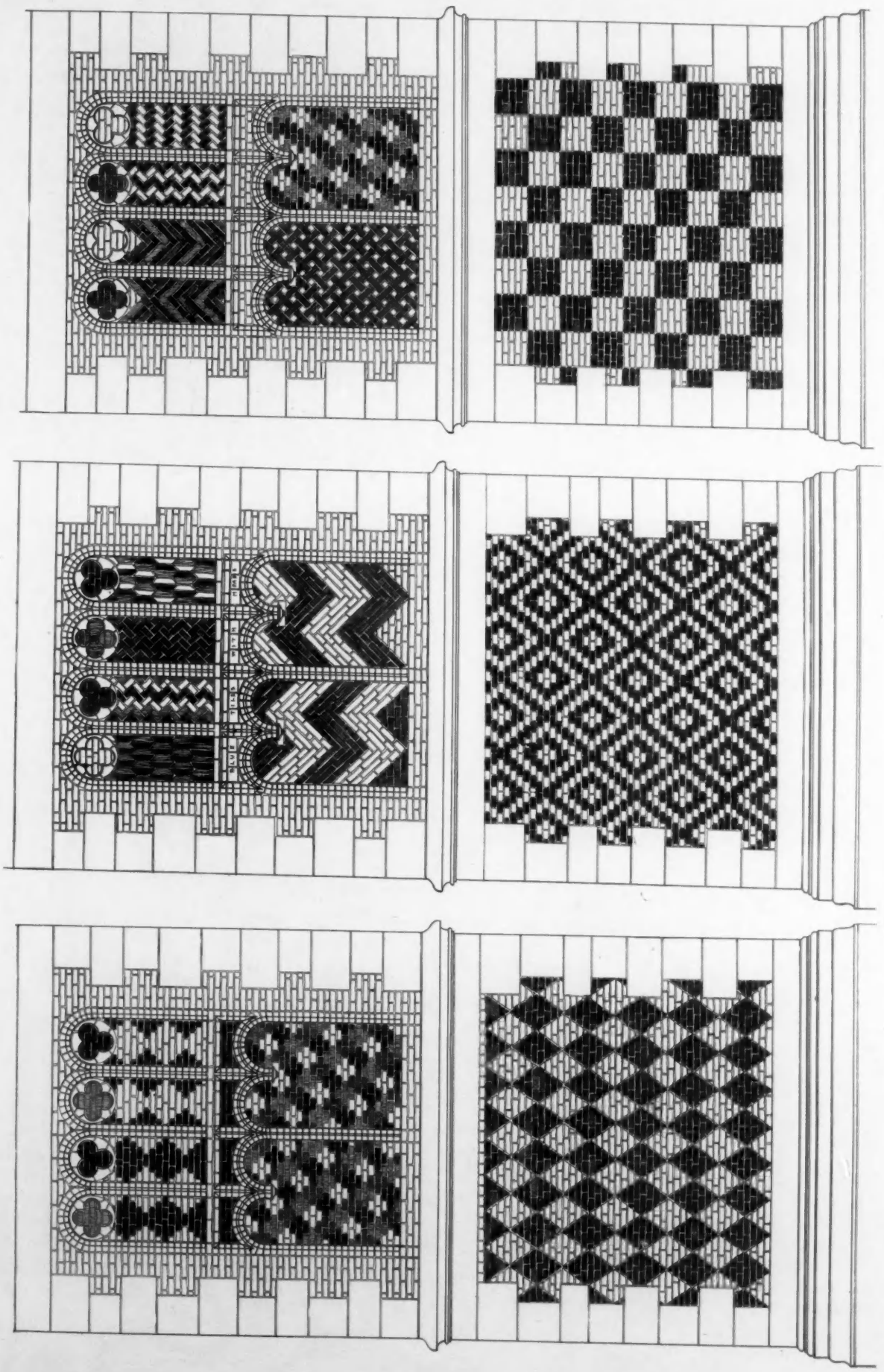
The brick additions at Fontainebleau are the service court, called the Cour de Henri IV., the Gallerie des Cerfs and its pavilion, built also by Henry, and the new wing of the Cour de Cheval Blanc, constructed under Louis XV. Three wings built by Henry IV., abutting an older building, form the Cour de Henri IV. In mass, these three wings make long lines of low one-story buildings, with attics, buildings marked at the corners and on the axes by higher pavilions. The center of the principal façade is composed of a triple mass, of which the central is the highest feature.



COURTYARD ELEVATION, SAINT-GERMAIN-EN-LAYE.

Although in plan all these wings and pavilions are of the same width, emphasis is given by an increase in the number of stories in the pavilions. Thus, the great middle pavilion has three stories and an attic; the minor central ones, as well as those at the angles of the court, have two. Each mass is roofed quite independently with a high, wedge-shaped roof. The central pavilion is set back some distance, and the space so formed is filled with a sort of semicircular niche. For a service court, the great entrance opposite this pavilion is imposing.

The material used is brick,



DETAIL OF BRICKWORK, COLOMBIER AT BOOS, FRANCE. WILL S. ALDRICH, DEL.

with stuccoed wall surface. As at St.-Germain-en-Laye, the exposed brickwork is used decoratively. The quoins and skewbacks are of stone; but all the architectural lines, cornices, sill-courses, and reveals are brick, contrasting prettily in color and texture with the light stucco. Even the lines of the mortar joint are taken advantage of and add a touch of decorative detail wherever brick is used. The main cornice is of brick; the block modillions are laid up in an ingenious fashion. The circular dormers frankly show the material, of which the jointing is a principal element.

The Cour de Cheval Blanc is not as picturesque a composition as that of Henri IV., but from the point of view of brickwork it is far more interesting. Very little stone is employed above the base course.

The use of the stone jamb inside the brick framework of the window is a unique method of enrichment. Then, too, the jointing of the string-courses, laid in alternate headers and stretchers on end, embellishes these bands nearly as much as would a dentil course. The design of the central brick dormer and the accuracy and delicacy of detail in the joints are most interesting.

CHIMNEYPIECE, CHATEAU DE SAINT-GERMAIN-EN-LAYE.

The chimney, as our "History of Architecture" tells us, was for climatic reasons developed in France rather than in Italy. Here we are shown how much can be made of so utilitarian a feature; witness the miniature pilasters, three-quarter columns, and pediments which make the chimneys they adorn a decorative factor of the composition.

Another façade constructed by Louis XV. shows exactly the opposite use of the color of brick. Here all architectural lines are of stone, and the panels are of brick laid in Flemish bond. So little brick is used that we infer that color, rather than economy, must have been considered.

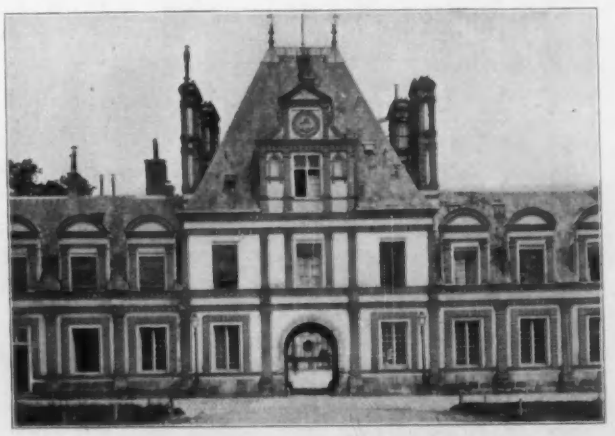
In the Gallerie des Cerfs a more interesting architectural treatment appears than in either of the service courts. Here are the important rooms of the château, adjoining the garden of Diana. Embellishments, niches, statues, and busts enter into the composition. The gallery takes its name from the trophies of the hunt, which once ornamented the interior of its upper section.

COUR DE CHEVAL BLANC, FONTAINEBLEAU.

They were removed when alterations were made by Louis XV. In this gallery were painted plans of the thirteen Royal Châteaux; but they, too, were covered by the hand of the re-decorator.

Two stories compose the gallery: the lower a classic arcade; the upper a high attic, with a dormer in every alternate bay. These dormers extend down through the attic; the panels between them are filled with oval niches. An arcade, flanked by similar though smaller motifs forming a kind of triple feature, marks the middle of the façade. A pavilion of the same character terminates the left-hand side.

Pilasters, cornice, and architrave are stone; brick forms the arches and imposts of the arcade and the panels and the jambs of the attic windows. The most interesting point, however, is the treatment of the niches, — jambs and imposts of stone, but backs and tops of brick. The brick joints are made to radiate from a central stone eye. The greatest care must have been taken in the molding of these bricks. The employment of brick in such a position affords a dark contrasting background to the



COUR DE CHEVAL BLANC, FONTAINEBLEAU.

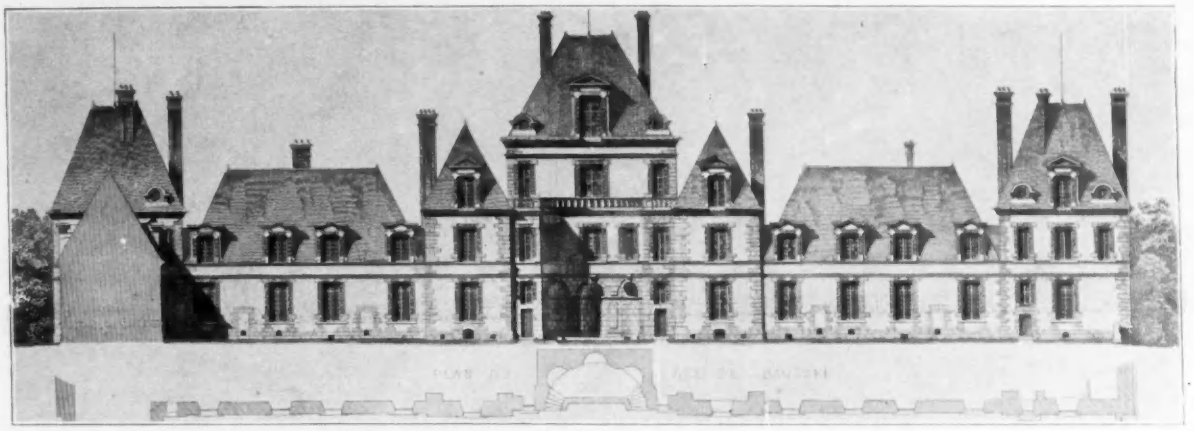
light marble statues. The comparison of the Gallerie des Cerfs with those of similar motifs built in the Gothic period shows how difficult it was for the later architects to free themselves from the older principles. In detail alone does this example differ from the brick court façade at Blois.

The additions to Versailles followed so closely upon the completion of the original building of Louis XIII. that the structure as it stands shows fewer variations in style than are usually to be found in a French château.

Versailles had singular good fortune: First, it was built in its entirety within a single epoch, and then, although it was the very center of interest during the French Revolution, it suffered less than other châteaux at the hands of the revolutionists.

The names of Louis XIV. and Mansard are so closely associated with Versailles that it causes some surprise to learn that Louis XIII. and Jacques Lemercier are responsible for the original building, the present Cour de Marbre.

The buildings of this present courtyard Louis XIV. preserved, in spite of the unlimited means at his command and against the wishes of his architects. It is recorded of him, indeed, that when an architect demanded as a vital essential to proper planning the demolition of the existing building, Louis replied that the building must then be rebuilt exactly as it had stood.

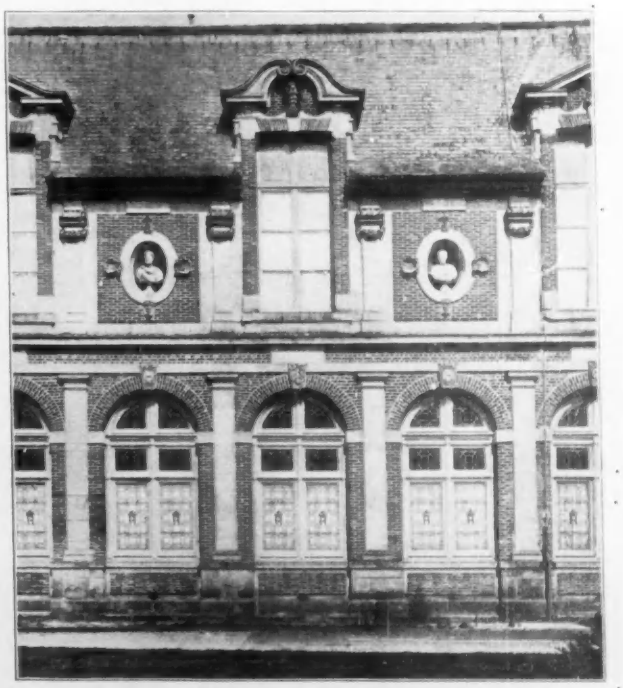


COUR HENRY IV., FONTAINEBLEAU.

Until Mansard was commissioned to erect the chapel and wings associated with his name, the alterations that were made did not affect the appearance of the older building from the Paris or court side.

It was with the development of the garden that the use of brick became almost universal to France; and the Cour de Marbre — so called from the employment of

END PAVILION, GALLERIE DES CERFS, FONTAINEBLEAU.



GALLERIE DES CERFS, FONTAINEBLEAU.

marble in the paving of the court — was designed to face a garden. The ugly expanse of cobblestones on which it fronts at present makes but a sorry setting.

In plan, this brick building of Louis XIII. is a series of receding pavilions or wings that form an open court, gradually narrowing as it approaches the central entrance. The original end pavilion can readily be discerned, marked by the little staircase turret in its angle.

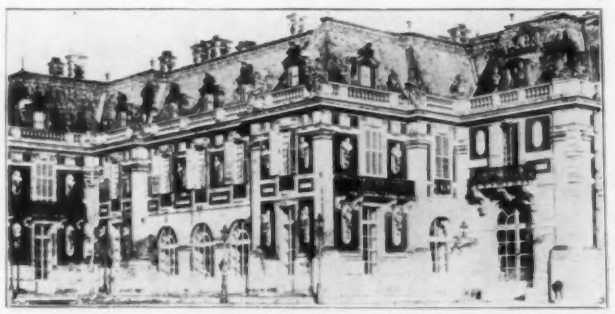
The interior of the structure is a hopeless tangle of rooms and small courts, the uses of which can be apparent to none but a thorough student of the times for which they were built.

The exterior façade is of brick and stone. It follows the Italian fashion in showing a balustrade above the cornice, but combines with this effect the high French roof. A sacrifice is made of the chimney, so picturesque a feature in the general type of buildings of an earlier date. In consequence the sky-line is meager and uninteresting. Then, too, the roof of two slopes, commonly attributed to Mansard, lends further destruction to the sky-line, broken now by only a tall flag-staff and chimney-pots that seem to protest silently against the destruction of an ornamental and useful feature.

GENERAL VIEW OF COUR DE MARBRE, VERSAILLES.

But below the cornice line there is much of interest. The Doric order is used, its cornice supported at the corner of each break by an angle pilaster. The bays so formed have each a single window in the middle save at the centers of the central motive and of the wings, where there are three. These windows break through the ar chitrav eand frieze of the entablature and extend down to the floor. They open upon balconies.

CORNER OF COUR DE MARBRE, VERSAILLES.



CORNER OF COUR DE MARBRE, VERSAILLES.

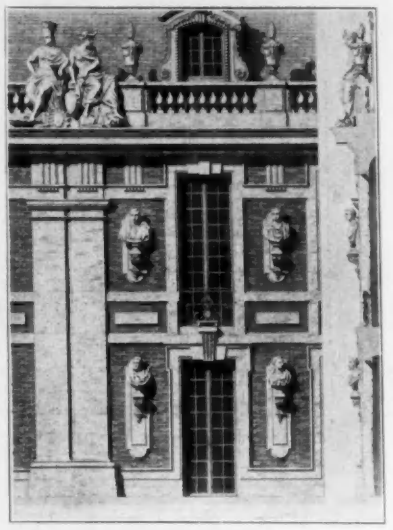
The height of the order is diminished by a high base-course through which the windows cut down to a stylobate of three steps.

The wall surface is of brick. This material fills the metopes of the frieze and the panels of the attic of the central feature.

The centers of the brick panels throughout the surface are marked by raised inner panels of marble, from which spring consoles supporting marble busts of the Roman Emperors. Upon the balustrade are allegorical figures actually *sitting* upon the rail.

The architraves of the windows return around the

base-course, and are flush with the string-course. The tænia of the architrave returns around the jamb and lintel of the upper window. The dentils of the cornice occur only as points of emphasis over the pilasters and windows.



ELEVATION OF A BAY IN COUR DE MARBRE, VERSAILLES.

The distribution of the masses of color has been carefully studied. This fact is apparent in the main cornice where the broad bands of stone would have been out of scale had the metopes been of the same material as the order.

There are some interesting variations in the composition of the angle pavilions where large openings occur. Here the frieze is omitted. The rustication in the corner and slight differences in the horizontal courses clearly indicate an addition. This rustication marks the corner of the terminal pavilion of the work of Louis XIII.

When we contrast this great effort, the Palais de Versailles, with the smaller buildings of the previous century, we find it wanting in that quality of composition that marked the well-nigh faultless work of the earlier builders. Whatever merit may come from a broken plan, the monotonous sky-line is nevertheless uninteresting, and the broken color of the wall surface, however attractive in a smaller building, here becomes unrestful rather than gay.

BUILDING ON STILTS.

THE character of the commercial buildings in our large cities often suffers from a false idea on the part of property owners and tenants that the vertical supports in the first story shall be reduced to the mechanical minimum required for absolute strength, without regard to the larger question of the appearance of strength in the exterior design. In other words, we are forced to boost our structures upon stilts and rest sometimes a twenty or thirty story building upon a couple of slender uprights and a big sheet of plate glass. This is æsthetically wrong, and our observation makes us believe it is practically unnecessary. While an abundance of light is desirable for every form of business, it is not reasonable to expect that one can do business with the same degree of illumination as if in the center of a large, uncovered field; and we have yet to see a case where a building that was designed with a proper consideration for the appearance of stability in the first story failed to rent well, or to give as much satisfaction to tenants as one which absolutely ignored the external effect.

The T Square Club Traveling Scholarship.

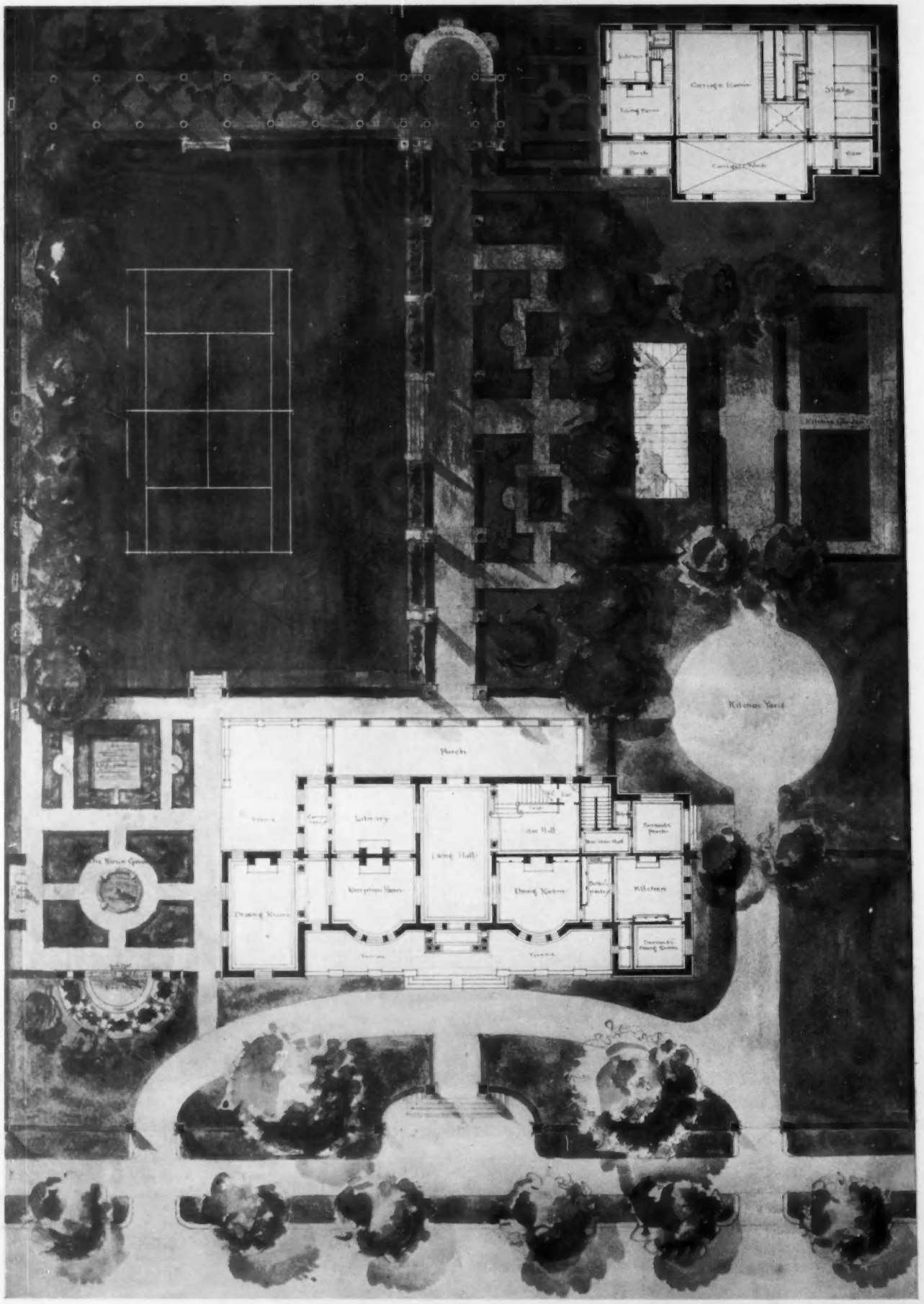
BY WILLIAM CHARLES HAYS.

OF the various organizations having as their purpose the promotion and practice of architecture and the kindred arts, the T Square Club is preeminent in the direction of endeavor to train its members in architecture by means of competitive design. In its earlier years, the young club, with its few but enthusiastic members, needed no incentive to produce excellent work other than the helpful criticism sure to be given. Those were the days when Wilson Eyre, Jr., John Stewardson, and Walter Cope were most effective workers in building the foundation. In striking contrast is the competition for the T Square Club Traveling Scholarship, the first holder of which, Mr. Lloyd Titus, sailed for Europe on May 19. The scholarship, lamentably small in money value (meaning but a few months abroad), is the reward of the past season's competitions in design.

The conditions governing all T Square Club competitions are substantially these: Drawings are hung early in the evening, giving an opportunity for a preliminary examination before the business meeting. After usual routine, the president invites certain of the more prominent men present to conduct the criticism, though let it be understood that all members are urged to comment. The chief motives, indeed, of criticism and judgment are the bringing out of individual thought, and the development of powers of discrimination. Following in regular order, each design is carefully considered and analyzed, the author often making notes. There is also a general summing up by the leading critic, who comments on the conditions of the problem which were mandatory — the keynotes which should have given tone and character to the designs. The judgment is by popular vote. Regularly printed ballot forms, with blank spaces for first, second, and third places, are used. It is compulsory that each voter shall name three designs, incomplete ballots being excluded from the count. Designs voted first place receive three points; second place, two points; and third place, one point. The three mentions are then awarded in the order of the total count of points. In computing the standing of competitors in the entire year's work, a similar method is followed.

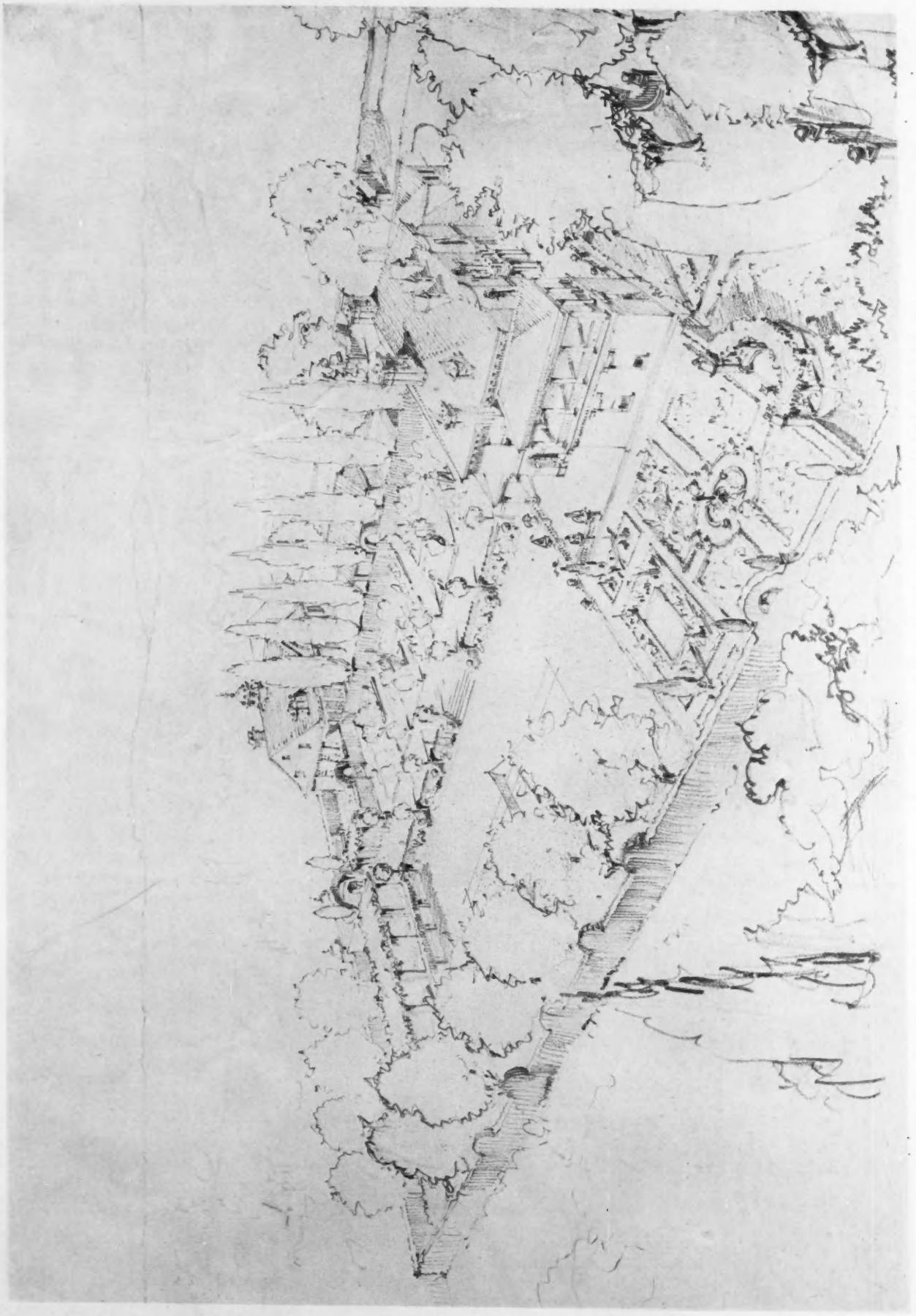
In the preparation of the programs of competition for the club scholarship, it was speedily decided: That the subject chosen should be one of the every-day problems of American practice, that local character should be emphatically required, and that the several problems should be so co-related as to develop a complete whole, at the same time reducing to a minimum the amount of actual work required each month. This last feature is indispensable, since the majority of our active participants have but little leisure time to apply to club work, being otherwise employed during the day.

The introduction to the programs for the year, as announced in the syllabus, contained the following: "As a result of the recent appropriation made to enable a member of the T Square Club to visit Europe annually for architectural sketching and study, a Traveling Fellowship has been established, and will be competed for in



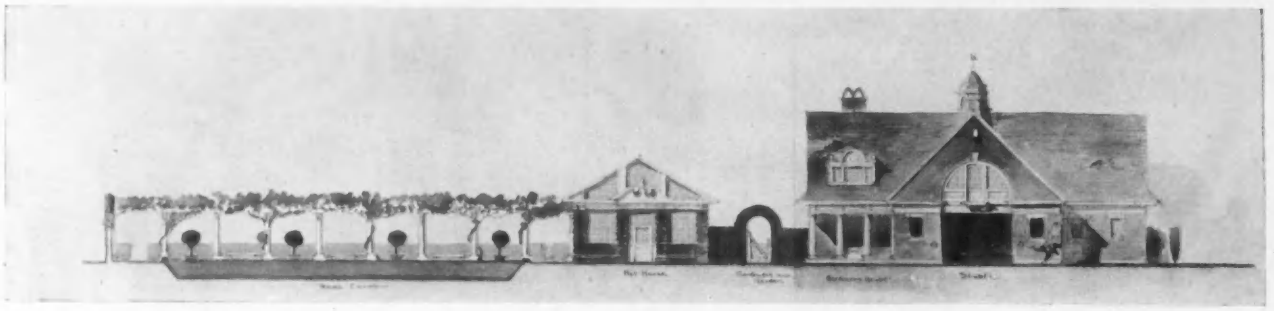
THE T SQUARE CLUB SCHOLARSHIP, PLAN OF WINNING DESIGN.

Lloyd Titus.



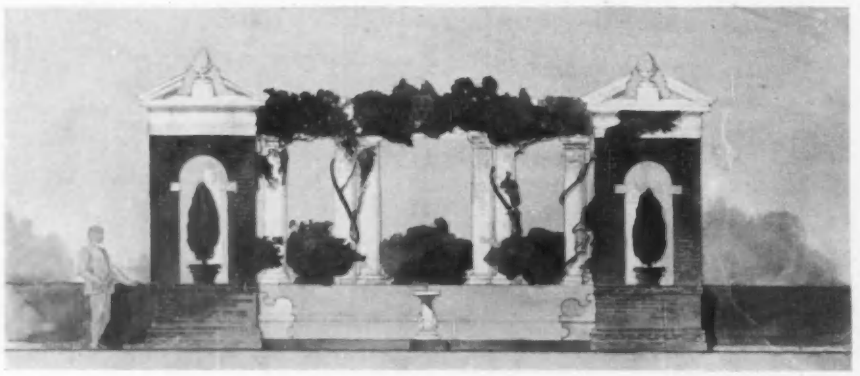
THE T SQUARE CLUB SCHOLARSHIP, PERSPECTIVE OF WINNING DESIGN.
Lloyd Titus.

the same manner as (and in lieu of) the gold medal for the highest average obtained in monthly competition.

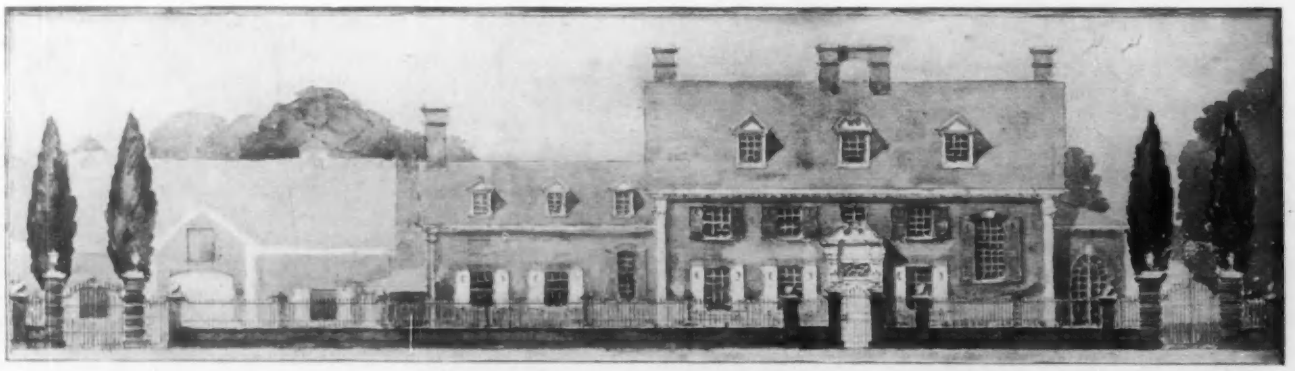


ELEVATION OF STABLE.
Lloyd Titus.

The Executive Committee realizes that the movement will mark an important step in the advancement of the club, provided that every member receives it in the serious spirit in which it has been conceived. While a higher standard might be reached by the competition of a few strong men, the greatest influence for good will be attained only by having twenty or thirty men competing regularly, and the whole club entering into the spirit of the contest. The motive of the program is the first effort to pursue the course advocated by the Architectural League of America toward a natural and national architecture. Upon the results of this experimental competition depends whether the award shall be increased or discontinued next year. In compliance with the expressed wish of the members of the club, these competitions will involve no more work on the part of the competitor than in the past, although the committee, having this matter in charge, has given careful study to the preparation of the programs, with the hope of securing better and fairer results. In order to cultivate more logical thought, it has been decided to give continuity to the monthly problems by relating the programs to one another, and they have been prepared with this end in view, as well as to make the series terminate with a general review. The syllabus is presented in such a manner as to form a sort of pocket memorandum, for notes and criticisms under each program. All drawings must be signed, and the last one reentered at the following meeting, corrected or not corrected, as the competitor sees fit. Thus, after a member has competed once, at the succeeding meeting he will enter an old and a new drawing, and in the last competition he will enter his entire set. Awards will be decided by the usual vote of the active members present, and each problem will be considered in the same class in making up an average of the mentions for the year." In the terms of the program, there were

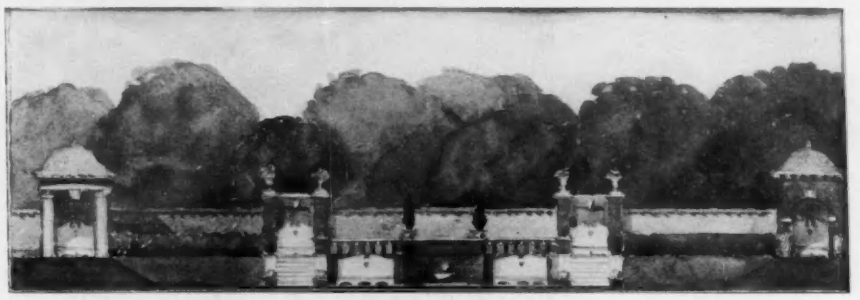


EXEDRA.
Lloyd Titus.



ELEVATION OF THE HOUSE.
Andrew J. Sauer.

"GIVEN. A nearly level semi-suburban plot of



ARRANGEMENT OF TERRACE STEPS AND WALL FOUNTAIN.
Andrew J. Sauer.

ground in the environs of Philadelphia, 200 ft. front between party lines by 250 ft. deep, with access from the front only."

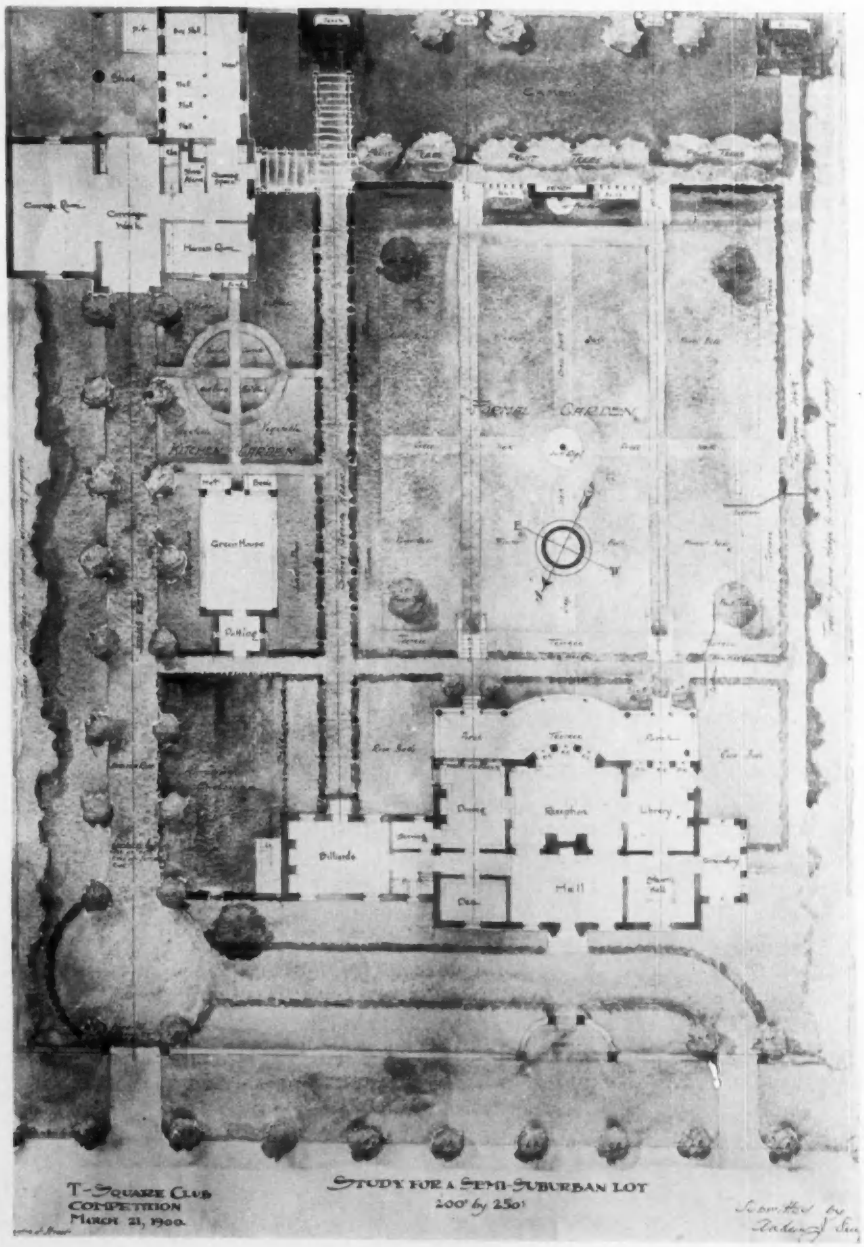
"REQUIRED.—A DOMESTIC ESTABLISHMENT.

"The owner is a progressive and public-spirited citizen, proud of his Philadelphia lineage, and a punctilious respecter of the traditions of his native place. Therefore, he wishes his new place to be free from any suggestion of affectation or showy display, and especially desires that his architect shall give all the buildings an expression which shall be as local and indigenous as may be consistent with the best forms of contemporaneous building and design. The buildings, which are to be erected from time to time, are to include a large modern house for a family of eight, and such outbuildings and accessories as are becoming and natural to a man of taste with a growing family."

ALBERT KELSEY,
WARREN P. LAIRD,
WALTER COPE,
Committee.

The first competition required: "A Block Plan at 1/8 in. scale of the entire property, including the sidewalk and one half of the street, to show the house and outbuildings and the general lay of the grounds. First, the estate should be considered in its relation to the community as a whole, and, second, it should be so disposed as to provide as great an amount of isolation as possible, while at the same time contributing to the openness and beauty of the public thoroughfare. An ordinance already exists requiring all buildings to be set back at least 25 ft. from the building line. Rendering optional. Note. — Each design should be well supplemented by explanatory notes written or printed in the margin of the drawing."

The actual number of drawings submitted, eighteen in all, was disappointingly small, but a high standard of excellence was set. In the general criticism, great stress was laid upon the requirement that the estate should be so disposed as to contribute to the "openness" of the thoroughfare. This interpretation virtually placed *hors de concours* several most interesting designs, in which the houses were placed far back from the road, with walled gardens, — such gardens being considered "shut in" and not in harmony with local spirit and tradition. Among these designs was the plan by Wetherill P. Trout, here repro-



REVISED GROUND PLAN.
Andrew J. Sauer.

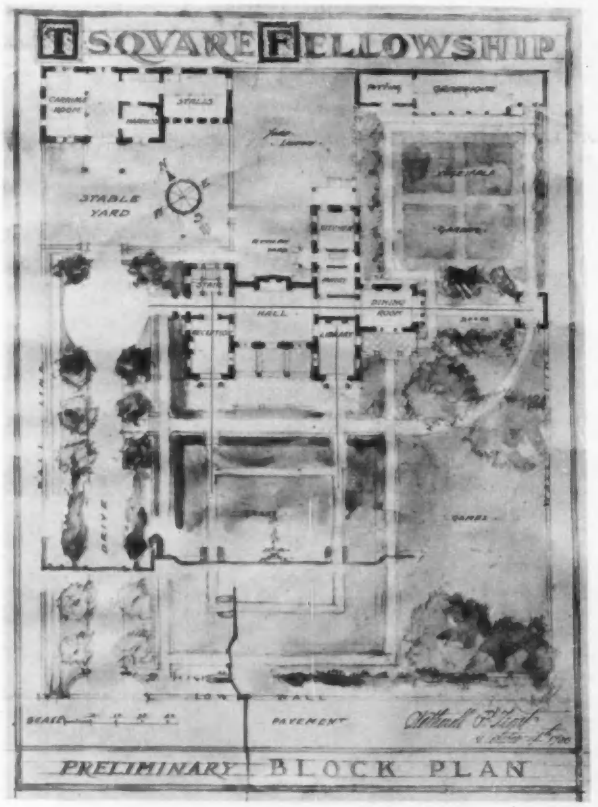
duced. In most of the drawings submitted, the various buildings were well disposed, in reference to exposures. This was especially noticeable in those of Messrs. Titus, Trout, and Hill. Several schemes showed ill-considered circulation, with gardens not easy of access, complicated arrangements of driveways, and omissions of proper service facilities.

Designs were submitted by Messrs. Titus, Sauer, Watmough, Hill, Trout, Wise, Leisenring, Bissell, Potter (2), Hokanson, Swales, Miles, Powers, Klauder, and three unknown. First mention, Lloyd Titus; second mention, Ira M. Hill; third mention, Herbert C. Wise.

The second competition required: "First and Second Floor Plans of the House at ⅛ in. scale. Rendering optional." There were twelve designs submitted, the mentions being awarded as follows: First, Richard L. Watmough; second, Wetherill P. Trout; third, I. M. Hill.

The third competition required: "Two Elevations of the House (front, and one side) at ⅛ in. scale. Rendering optional. Marginal notes to explain quality and color of materials." Ten designs were hung. Andrew J. Sauer won first mention; I. M. Hill, second mention; W. P. Trout, third mention.

The fourth competition required: "First Floor Plan, and Two Elevations of Stable, at ⅛ in. scale." Eight drawings were in competition, and the places taken were: Lloyd Titus, first; A. J. Sauer, second; I. M. Hill, third. Before this competition several of the strongest men had discontinued, owing to first misconceptions of the program, and the natural desire to avoid the making of radical changes from the preliminary plans. Hereinlay the weakness of the scheme of closely related programs.



PRELIMINARY BLOCK PLAN.
Wetherill P. Trout.

The fifth competition required: "Drawings at ⅛ in. scale of such of the Out-buildings and Accessories of the competitor's scheme as he may care to amplify. Also details at ¾ in. scale of the most important architectural elements of the design. Rendering optional." Messrs. Titus and Hill (each with six credits), Sauer (with five points), and Watmough (three points) alone entered this competition. Mr. Watmough was awarded first place, Mr. Titus was second, and Mr. Hill was third.

The sixth competition called for: "A Revised Plan, on Whatman paper, at ⅛ in. scale, of the entire estate, including sidewalks and curb, showing new arrangements of buildings and garden as minutely as possible. To be rendered in wash, monochrome, or color." The same four men were represented, and mentions were in this order: Sauer, Titus, Watmough. Mr. Walter Cope led the criticism. The plans had been greatly improved since the first sketch, that of Mr. Sauer being open to but little criticism. Mr. Titus showed a very short avenue of maple trees, dividing his gardens very unpleasantly. (In a subsequent revision this feature was removed, to the vast improvement of the scheme.)

The seventh competition required: "A Bird's-eye View Perspective of the entire estate (rendering in line). The point of view to be taken at an elevation of about 100 ft. from a point which will best show off the competitor's design. This drawing to be neatly presented, with border lines, and a clearly printed title, — 'Final drawing submitted in the T Square Club Fellowship Competition.'" There were three designs: Mr. Titus receiving first mention; Mr. Watmough, second; and Mr. Sauer, third. Mr. Frank Miles Day conducted criticism.

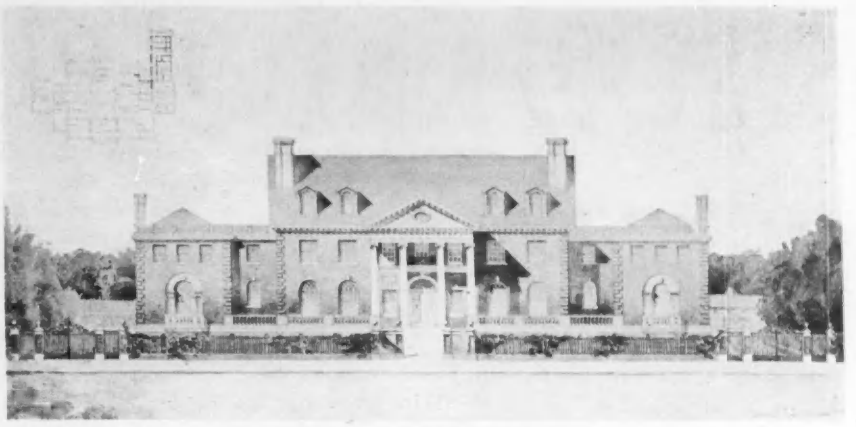
The total points scored by each competitor were: Mr. Titus, thirteen; Mr. Sauer, nine; Mr. Watmough, nine; Mr. Hill, seven; Mr. Trout, three; Mr. Wise, one. (The two last named competed in the first three competitions only.) Mr. Lloyd Titus, therefore, was announced as the winner, with Andrew J. Sauer and Richard L. Watmough equal honorable mentions.

A résumé of the criticisms offered, relative to the winning design, follows: "The house is well placed to secure privacy in the living portions, and the exposures are well studied, with morning sun in the dining room and best bed rooms. The family porch and terrace, also the library, overlook the tennis lawn, and enjoy the sunsets. There is an attractive vista from the dining room, through the reception room and drawing room, to the rose bower and fountain. The entrance terrace is meager. The arrangement of dining room, pantry, and kitchen is faulty, a scullery being essential in houses where the pantry forms the communication with the kitchen.

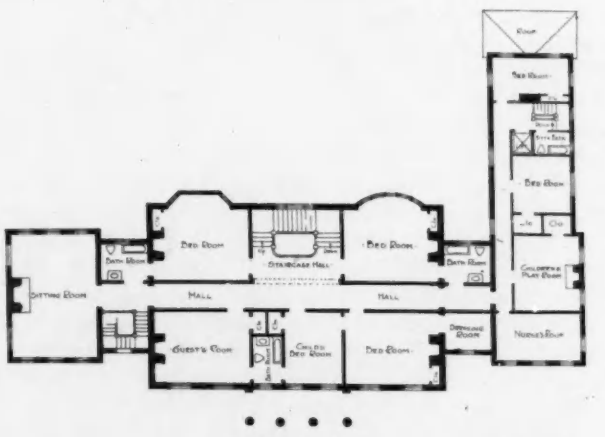
"The stable plan shows a congested carriage house, from which a tortuous way leads to an ill-ventilated group of stalls. The arrangements for gardener and coachman are good. The elevation is much superior to the plan. The great entrance archway, with hay doors above, is well designed.

"The relative positions of house and stable insure freedom from odors, the prevailing winds, except in winter, being southwest. The stable is not very easy of access

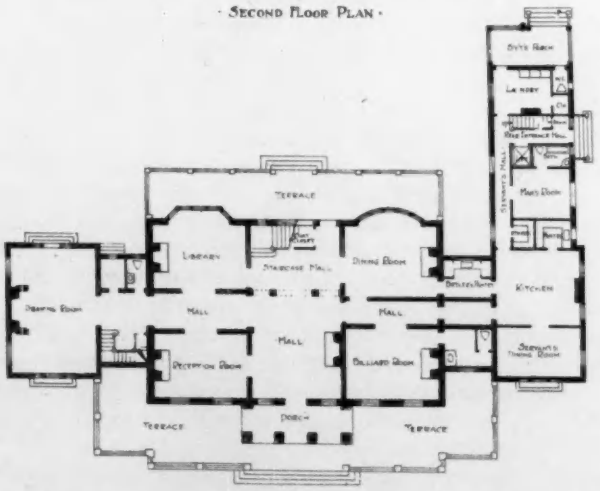
from the house. A pleasing disposition of sunken lawn for games and raised flower beds, between which is the long axial pathway, terminating in a well-conceived yew bower. The arbor at the southeast and the shady walk at the southwest are attractive. The formal arrangement of statues and seats, with high-cut hedge forming the property border, though well designed, may be criticized as inappropriate to our climate, and not expressive of our simplicity of living. The rose garden is a pleasant place, with its fountain, lily pond, and exedra. The latter, with growing plants, between concentric semi-circles of columns, is a charming thought, but perhaps is placed in too exposed a situation. "The scheme, as a whole, is a trifle too formal, but expresses well the station in life of its owner. The final review shows a marked improvement in the successive steps of this design. Mr. Titus, profiting by criticism, has shown much discernment, and has excelled in a general grasp of the conditions most important in the problem."



ELEVATION OF THE HOUSE.
Richard L. Watmough.



SECOND FLOOR PLAN



FIRST FLOOR PLAN

T SQUARE CLUB SCHOLARSHIP COMPETITION. PLANS OF THE HOUSE.
Richard L. Watmough.

"Mr. Andrew J. Sauer's design is the plan of a house inadequate to the needs of an owner as described in the program. It has, further, a serious fault in its basement kitchen and service. In elevation, this house surpasses its competitors in that quality of 'local character' so emphasized in the requirements. In the ground plan, possibly an undue prominence has been given to the formal garden. The various gardens are well placed, but the kitchen garden and greenhouse lack relation to the formal garden. The raised green for games at the extreme south, with its border of fruit trees, is attractive, and the arrangement of small terrace, seats, and fountain is a fascinating bit of detail. The stable plan is one of the best submitted. The driveway, parallel to the street and passing by the front door of the house, was adversely criticized, as was the monotonously long covered arbor. The trees on property lines, to shut out adjoining estates, secure a considerable degree of privacy."

"Mr. Richard L. Watmough excelled in the design of the house. It is a house meeting the requirements of the owner in greater degree than any others. It is dignified, conveniently planned, and provides ample room with little wastefulness. The exterior is well disposed in mass, simple and chaste in detail, and has local character. The placing of the dormer windows in the roof and the narrowness of the front terrace at the portico have been remarked."

The results of the competitions have demonstrated the wisdom of the innovation. The standard of work has been high, the club meetings have been well attended, and a spirit of seriousness and interest has prevailed. It is very earnestly to be hoped that the scholarship may be continued a permanent feature of the year's work, with a possible improvement in the programs by somewhat differentiating the problems, to the end that participants meeting with scant success at first may not be prevented by discouragements from deriving the greatest benefits possible, in latter contests.

Mr. Titus, the winner, is fundamentally a T Square Club man, not having had the advantage of academic training in architecture. He has been an indefatigable worker in design, and has won many mentions. Last year he received the gold medal of the club. He has twice been honorably mentioned in competition for the John Stewardson Memorial Fellowship.

Fire-proofing.

SOME INCONSISTENCIES IN MODERN FIRE-PROOF DESIGN.

BY J. K. FREITAG.

(Concluded.)

THE prevalent use of stone and marble may also be cited as among the familiar misuses of incombustible materials. Strictly speaking, the use of granite and marble especially should be avoided in any structure where the combustion of its own contents, or the combustion of any neighboring structure, would produce a temperature sufficient to destroy these materials. Such limitations, however, are generally overbalanced by the architectural requirements of the exterior treatment. It would certainly be unfortunate for the appearance of our cities if all granite and marble façades were abolished because subject to possible injury by fire, and yet the cases of the Chicago Athletic Club building, with its beautiful sandstone front completely destroyed above the third floor, and the Home Insurance Building in New York, where the marble front had to be largely replaced, testify to the cost of reconstruction where such materials are employed and subjected to severe test conditions. This danger, however, will gradually grow less as the interior finish and contents receive more consideration, and as our cities become more and more fire-proof as a whole, — communities of fire-resisting structures, rather than conglomerations of commendable fire-proof buildings surrounded and menaced by highly inflammable and dangerous neighbors. But for use in important load-carrying capacities, where not reinforced or supported by approved fire-resisting materials, the use of granite, marble, slate, etc., must surely constitute an inconsistency in modern design. Isolated polished granite columns, often supporting great loads, may be cited as familiar examples, as well as the more frequent use of marble and slate stair-treads. It has been said that 90 per cent. of the staircases in modern fire-proof buildings would be found utterly unreliable in the event of fire, either for the escape of the inmates, or for the use of the firemen. If such stone treads are used, they should be placed *over* cast- or wrought-iron treads, which would then support the slate or marble even after disintegration.

As regards the features of fire-proof construction which are more popularly regarded as requisite, such as floor and roof construction, and the employment of proper materials, the tide of current practice and favor has undoubtedly turned for the better; but in our requirement II., viz., the general internal plan or design necessary to make structures fire-proof, independent even of the materials used, much of even greater importance remains to be done. Major considerations are largely overlooked for minor ones, and attention is diverted to trivial matters of detail while broader and more essential general features are left to care for themselves.

Vital principles independent of the materials employed or of the equipment provided for extinguishing fire, comprise such questions as the subdivision of areas, interior light shafts, stairways, and elevator shafts.

The most noticeable cases of unrestricted floor areas occur in the so-called department stores, where the management seeks to secure large areas unobstructed by division walls, in order that the customers may be duly impressed by the extent and completeness of the store. This hazard is extremely difficult to overcome, as any attempt to subdivide the large areas to suit the various component departments would require constant change to care for the expansion and shrinkage of these departments under their varying needs of growth and season. The task of surrounding and effectively fighting a fire of large area is also a much more serious matter for the fire department, and for this reason a maximum undivided area in city buildings is usually prescribed by the city building ordinances, and by the fire insurance companies.

Division or curtain walls are nevertheless to be strongly recommended, and all openings connecting apartments separated by fire-proof walls should be provided with approved fire doors.

Office buildings, apartment houses, and hotels generally require little attention as regards the subdivision of large areas, but the proper insulation or protection of dangerous areas, such as boiler and machinery rooms, here becomes of the utmost importance.

The prevalent use of interior light shafts and open stair-well holes and elevator shafts certainly constitutes the greatest inconsistency to be found in present methods. With what care and attention are floor systems and column protection provided, and then, to light floor areas removed from wall windows, open light shafts are introduced, extending usually from the ground floor to the roof, where the area is covered by a large skylight; or, if this common evil does not exist, open stair wells and elevator shafts run through the building from basement to roof, forming continuous flues and the most effective means of communication possible between the various floors.

The following extract is taken from a valuable paper entitled "Light Wells and Other Vertical Hazards, as Found in Department Stores," by Mr. E. U. Crosby, formerly manager of the Underwriters' Bureaus of New England, now general agent of the North British and Mercantile Fire Insurance Company.

"The light well, as now arranged, may be considered the greatest vertical hazard, but there are others.

"The original small store had a stairway, the growth of which has kept pace with that of the building. We now find several stairways, at least one of which is apt to assume grand proportions and extend from basement to second or third story, if not to the top of the building. At times this is in or adjoining the light well, or by itself is used for spread of light and for ventilation. All such stairways are unenclosed, and at times are made use of for display of wares.

"The use of elevators increases yearly. Some stores have from one to two dozen. They are not enclosed, much less cut off, and they are frequently located with stairways."

These comments, applied particularly to department

stores, are quite as applicable to hotels, apartment houses, or office buildings. Innumerable instances may be cited to show that such open communications throughout buildings are the causes of rapid spread of fire, and consequent damage, as they are likewise the means of transmitting water or smoke, with the attendant menace to stock contents, and the lives of those within the structure.

The remedy cannot be found through the use of any horizontal shutters or hatches. These, if made to work automatically, seldom operate when required, and it is impossible to secure any such system which will be smoke- and water-proof. The passage of smoke or water is often quite as serious from the standpoint of insurance as actual flame, and smoke spread from floor to floor may cause panic or suffocation to the inmates. The only consistent remedy is to be found in isolated stairways and elevator shafts, completely enclosed by fire-proof partitions, and provided with satisfactory fire-resisting doors. If this is claimed to be impracticable, attention is called to the fact that both stairways and elevator shafts *have* been constructed in this manner, and they are neither inconvenient nor unsightly. In elevator doors, wire glass will permit observation by the operator at each floor, or some such automatic signal device may be used as is now employed in large office buildings, where passengers are indicated by an electric flash light in the elevator car to notify the operator.

In the same paper previously quoted, Mr. Crosby recommends as follows: —

"Stairs and elevators should be in brick shafts with spacious entryway on each floor within each shaft. A standard slide fire door should be hung at the shaft side of each opening into the entryway, permanently secured open by a 600 deg. F. solder releasing device. This is to insure that the door shall not be closed by hand in time of panic, and yet will close automatically at a high temperature. There should be two or more door openings from each floor into each shaft. They should extend but part way to the ceiling, thus reducing the tendency of smoke to escape in that direction. The normal draught would be toward the ventilating ducts, and should be sufficient to reduce the danger of hot-air and smoke explosions.

"The placing of doors at shafts is open to criticism inasmuch as they might be closed while people were yet alive within the burning room. We believe this can be met by concealed sliding doors, operated by an automatic device located near the floor, and requiring as high a temperature at that point as would be obtained by the presence of flames.

"These shafts, with glazed brick, tile, or mosaic walls, should present a pleasing appearance, and, above all, afford a sense of security to the customer which some day may be a feature in the popularity of a store."

The third requirement made of consistent fire-proof design, *i. e.*, exterior precautions to prevent the communication of fire from or to adjoining property, is one which concerns duty or obligation to adjacent property holders, as well as considerations of self-interest. Fire-proof construction hardly deserves its name until fire can be confined to the apartment in which it started. Fire-proof floors, roofs, and partitions are provided without question to confine fire within the spaces limited by these constructive features, while the exterior walls are left with numerous openings which menace neighboring property, or which subject the building itself to hazard from the close proximity of neighboring buildings of dangerous character.

The principal danger, whether that of *from* adjoining buildings or *to* adjoining buildings, will largely depend upon circumstances, but ideal conditions should make the latter consideration quite as important as the former, "and if an architect should be required to draw specifications for a building adjoining others with knowledge beforehand that its entire contents, from cellar to roof, were to be totally consumed, and he were under a bond to pay damages to surrounding property, he would not be more severe in his exactions than should a building law protecting neighboring rights in the enjoyment of property."[1]

In event of the contents consisting of large quantities of combustible materials, self-interest also demands that wall openings shall be capable of confining the fire, in order that it may not spread from floor to floor by means of such exterior openings. The cases of the Chicago Athletic Club building fire and the Livingston Building fire in New York, as well as innumerable other instances, serve to show the danger from this source. And now that this factor of hazard is becoming recognized, the means of remedy are at hand to supply the demand. The ideal solution may not have been reached, but very acceptable methods are certainly to be had. For warehouses, stores, etc., the standard tin-covered fire shutters are still used with great efficiency on alleys or rears where the appearance does not constitute an important feature, but for more conspicuous locations and on the fronts of all classes of buildings, a more sightly arrangement than exterior hanging shutters is necessary.

This want has been met by the introduction of solid metal or metal-covered window frames and sash, in combination with Luxfer prisms, wire glass, or plate glass electro-glazed in relatively small panes. Architects and owners are now very generally familiar with many tests which have been made with such windows, designed to act as fire retarders, but it is to be hoped that appreciation will be shown by a more general adoption of such admirable features. Nor should the use of such fire-resisting windows be considered as applying only to mercantile buildings. They could and should be used in all exposed cases in hotels, apartment houses, and office buildings. If the Luxfer prisms or wire glass are objected to because of the hindrance to outlook, a combination frame may be used, such as is now on the market, in which the lower sash is divided into three vertical panes, the two side ones being glazed with wire glass, while the center one is electro-glazed with one-quarter inch plate glass in panes three or four inches square.

With the care at present bestowed upon the constructive features of buildings intended to confine and resist fire, the continued use of plate and German glass for large and frequent exterior openings constitutes an inconsistency which must, sooner or later, give way to more approved and rational methods of protecting exterior doors and windows.

[1] See "How to Build Fire-proof," by F. C. Moore, THE BRICKBUILDER, March and April, 1898.

Selected Miscellany.

NOTES FROM NEW YORK.

Prophesying is always dangerous, and, in fact, could be done with more security a month from now, but there are conditions in force at present which certainly enable us to obtain a clew as to what the near future has in store. It is more certain every day that the slow but sure decline in the prices of building materials to a normal point is beginning to revive operations which were checked by the sharp advance six months ago, and to give courage to those who have been holding off. There are a number of actual projects of which we have heard, which are only waiting until the close of the dull summer season before they are started. To feel the pulse of the building trades one must consult the architects. From what we hear, they are quite dull this summer, and many of them are enjoying well-earned vacations; in fact a sensible tendency of this closing year of the century seems to be for men to take as long a period as possible during the summer for rest and recuperation.

Among the leading news items is the announcement that a new company has been formed for the purpose of erecting an eighteen-story office building directly opposite the new Custom House site. The building will be known as the Maritime Building, and devoted chiefly to shipping interests, and will be erected from plans by Henry J. Hardenburgh; cost, about one million dollars.

W. W. Astor will build under a twenty-year lease a ten-story hotel on the site of the Hotel Stonington, on Broadway, between 45th and 46th Streets. William C. Muschenheim, the proprietor of the "Arena," is the lessee. These undertakings show that renting conditions are such that, coupled with the current prices of building materials, owners of big properties and capital see a profit in work executed at the present time. No better argument could be formed than this in support of the general opinion that the fall will develop a generous activity in all branches of the real estate market, for after all, the prosperity of real estate depends upon renting conditions.

PARK PAVILION, KANSAS CITY, MO.
Terra-Cotta Columns made by the Northwestern Terra-Cotta Co.
Van Brunt & Howe, Architects.

PANEL FOR POST-OFFICE, NEWPORT, KY.
Winkle Terra-Cotta Co., Makers.

TYMPANUM PANEL OVER ENTRANCE, ST. AUGUSTINE CHURCH, PITTSBURGH, PA.
Perth Amboy Terra-Cotta Co., Makers.
Rutan & Russell, Architects.

NOTES FROM PITTSBURGH.

A beginning has at last been made on the new Union Station for the Pennsylvania Company, and the old station, which was built after the riots of 1877 as a temporary structure, has been torn down. The new building is to contain the general offices of the company. The changes include the raising or lowering of all tracks of the entire Pennsylvania system and the doing away with all grade crossings in the city.

Several new bridges across the Allegheny are being talked of, and the government engineers have reported that the present bridges are too low and should be raised. As this would cause a great change in the grades of adjacent streets, there has been considerable objection from property holders in those neighborhoods.

There has been considerable newspaper talk about the proposed addition to the Carnegie Institute; some have advocated the building of a separate building, while others have even proposed moving the present building across Forbes Street and then building the addition. However, as the plans of Alden & Harlow have already been approved, this discussion seems a little too late to have much effect.

Among work soon to be let may be mentioned the ten-story office building for the Central District and Printing Telegraph Company, on Fourth Avenue, Alden & Harlow, architects. The same firm have also prepared plans for a Carnegie Library, to be built at Duquesne, Pa.; cost, $300,000.

Charles Bickel is the architect for a new office building, to be built at the corner of Fourth Avenue and Grant Street.

ST. PAUL'S CHURCH, CHICAGO.
Roofing tile furnished by the Ludowici Roofing Tile Co.
H. J. Schlacks, Architect.

NOTES FROM ST. LOUIS.

A number of important buildings which were contemplated for this season have been either postponed or abandoned altogether, and the work that is being done is in the way of smaller warehouses and residences.

The new building for the Knox Estate, corner of Broadway and Franklin Avenue, which has been de-

Terra-Cotta Fire-proof Construction.
NEW PRUDENTIAL BUILDINGS, NEWARK, N. J.
Executed by the Raritan Hollow and Porous Brick Co.
George B. Post, Architect.

Terra-Cotta Fire-proof Construction.
NEW PRUDENTIAL BUILDINGS, NEWARK, N. J.
Executed by the Raritan Hollow and Porous Brick Co.
George B. Post, Architect.

signed by Mauran, Russell & Garden, will be of brick and terra-cotta, in the English Renaissance style.

T. C. Link has been appointed architect for the new Capitol Building at Jackson, Miss., which will cost $1,000,000. Mr. Link's plans were adopted from among those submitted in the recent competition for the building.

E. C. Klipstein was the successful architect in the recent competition held for the new Kirkwood High School Building.

After numerous efforts to commence the building of a new city hospital to replace the one destroyed by the cyclone some years ago, there now seems to be a prospect of something being done, the Board of Public Improvements having draughted an ordinance with a view to proceeding with the work. A commission was appointed some years ago to prepare preliminary plans, contemplating a hospital on the pavilion plan to cost $1,000,000, but the financial condition of the city has prevented commencement on the work. There is now available about $240,000, and a fund accruing for building purposes at the rate of $50,000 per year.

OFFICE BUILDING, FIFTH AVE. AND 19TH STREET, NEW YORK CITY.
Executed in white semi-glaze terra-cotta.
Excelsior Terra-Cotta Co., Makers.
Robert Maynicke, Architect.

NOTES FROM SAN FRANCISCO.

The building business continues good with every evidence of further improvement through the winter. The general character and design of structures show a marked change for the better. There was $1,160,000 more expended during the first seven months of this year than for the same period of last year.

Two competitions were lately decided, the open one for the Oakland Free Public Library, the gift of Andrew Carnegie, in which Bliss & Fabille were the successful architects, both of these gentlemen coming, some little time back, from the office of McKim, Mead & White. The contract has just been let for $47,000, and calls for the building to be finished March 18, 1901. The materials will be light gray brick and terra-cotta.

The other competition, a limited one for the Mutual Savings Bank Building, was awarded to Curlett & McCaw; the cost will be in the neighborhood of $300,000, and the material will be either brick and terra-cotta, or sandstone. It will be entirely fire-proof.

Percy & Polk have let contracts amounting to $100,000 for a business building, seven stories high, adjoining the handsome Hale Building on Market Street. It will be of richly-ornamented white terra-cotta in the Byzantine style. The same architects have in hand a residence for the widow of the late Robert Louis Stevenson, the novelist.

TERMINAL, WARNER BUILDING, PHILADELPHIA, PA.
Conkling-Armstrong Terra-Cotta Co., Makers.
C. W. Bolton, Architect.

William Mooser has been appointed architect to the new Board of Works. His duties will consist in passing on plans and specifications for new buildings or changes in old ones.

PANEL.
Made by the New York Architectural Terra-Cotta Co.

IN GENERAL.

Henry Maurer & Son, manufacturers of fire-proof building materials, of New York City, are erecting and furnishing a 30-ft. front stone dwelling house, three stories high, at Ogontz, Pa., wherein they are using their latest system of floor construction — the "Herculean" terra-cotta flat arch; this system eliminating the use of iron beams and making an absolutely fire-proof building. Much interest is being manifested by the building fraternity in this operation.

PILASTER AND JAMB.
BANK, WATERTOWN, MASS.
Atlantic Terra-Cotta Co., Makers.
C. H. Brigham, Architect.

Edward R. Diggs & Co., of Washington, D. C. and Baltimore, Md., are furnishing for the U. S. Government Printing Office, at Washington, D. C., about 1,250,000 of their light-colored impervious front brick (this being one of the largest light-face brick contract ever sold in this country). Among some of the other operations using their brick are the following: Guardian Trust Building, Baltimore; Winchester City Hall, Winchester, Va.; apartment house 16th and U Streets, N. W., Washington; the Bond Building, New York Avenue and 14th Street, N. W., Washington.

The Columbus Face Brick Company has been awarded the contract to furnish its "Ironclay" flashed brick for the New Electric Power House of the Manhattan Railway Company, of New York City, said to be the largest power house in the world.

James A. Davis & Co., Boston, have been awarded the government contract which calls for 15,000 barrels of Portland Cement at Portland Harbor, Me. They also have contracts to supply their Alpha and Lehigh brands of Portland Cement for the New Cambridge Bridge, Boston; Red Bridge Dam at Three Rivers, Mass.; Boston Electric Power House, Boston, and Edison Electric Power House, Boston.

Among the contracts recently placed with the Powhatan Clay Manufacturing Company for their cream white and gray front brick is the new building for Adams & Co., Sixth Avenue and 21st Street; new office building at Broad Street and Exchange Place (about 1,000,000 white brick), stores and lofts, Fifth Avenue and 19th Street, all of New York City; gray brick for the Jerrifer Building, Washington, D. C.; Seaboard Air Line Depot, Petersburg, Va., D. Wiley Anderson, architect; St. Andrews' Parish House, Richmond, Va., same architect.

NORTH AMERICAN TRUST COMPANY BUILDING, NEW YORK CITY.
Bruce Price, Architect.
Front Brick supplied by the Powhatan Clay Mfg. Co.
Fire-proofing supplied by the National Fire-proofing Co.

PANEL. APARTMENT HOUSE, NEW YORK CITY.
New Jersey Terra-Cotta Co., Makers.

A SERIOUS DAMAGE SOON REPAIRED.

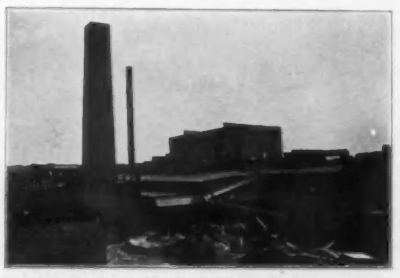
THE Hydraulic-Press Brick Company, by which we mean both the parent company in St. Louis and the branches in the various large cities of the country, has repeatedly won a name for itself by the excellent quality of its manufacture and the even value of its products, no less than by the thoroughly business-like methods by which it conducts its affairs. The excellence of its equipment and management has been shown in a very interesting manner by the results of a fire on the night of May 14, by which the works of the Washington Hydraulic-Press Brick Company were almost entirely destroyed by fire, nothing being saved but the office, the stables, and the clay sheds. These works, consisting of engine and machine houses, shops, kiln sheds, warehouses, etc., cover an area of about ten acres and are one of the largest and most important of the Hydraulic-Press Brick Company group. They are situated at Waterloo, Va., a few miles from the city of Washington.

Realizing at once that a disaster of this sort would mean a great deal to the architects and builders who are de-

pending upon the output of the yard, it was determined to at once draw upon the resources of the company in such a manner as to put the Washington works on its feet with the least possible delay. As Mr. W. N. Graves, general superintendent of the Hydraulic yards, was confined to his house by injuries received in a recent accident, President Sterling hastened to Washington, while the remaining officers of the company, after consultation and conferences with the railroad officials and their own local managers, decided to dismantle and ship bodily to Washington from the works of the parent company in St. Louis, two presses with all connections complete, ready for operation. At the same time the chief millwright and builder of the company was sent on from St. Louis with all the needed drawings of buildings, and authority to employ all requisite assistance; while skilled employees of the company were hastened to Waterloo to wreck the destroyed machinery and to load it upon cars for shipment for St. Louis, where it could be repaired and thoroughly restored to its original condition, so it could take the place of the presses shipped East from St. Louis. It was promised that in thirty days the Washington works should be in operation again.

WASHINGTON HYDRAULIC-PRESS BRICK PLANT, MORNING AFTER FIRE.

The first shipment from St. Louis was on May 26, and reached Waterloo on the 31st. The remaining three cars of machinery reached their destination in an equally short time, and no difficulty was experienced in obtaining all the carpenters and brick masons needed, so that new and substantial buildings, built of brick, were under roof before the machinery was all in place; and so successfully was the work planned that on June 19 a telegram was received by the St. Louis office, stating that the machinery was working to its full capacity and everything was in satisfactory condition. The promises made had been fulfilled in twenty-eight days, and the Washington Hydraulic-Press Brick Company has since been running day and night to regain lost time. As the damage to the stock of bricks was comparatively light there has been no interruption of shipments and orders have been promptly filled. This shows what good executive ability with means and men behind it can accomplish in an emergency. We print herewith two photographs, one taken the morning after the fire, and the other just thirty days later. These tell better than any words what had to be done.



WASHINGTON HYDRAULIC-PRESS BRICK PLANT, THIRTY DAYS AFTER FIRE.

THE ATELIER FITZWILLIAM, AUDITORIUM BUILDING, CHICAGO.

PERSONALLY CONDUCTED BY F. J. FITZWILLIAM, A PUPIL OF D'ESPOUY, WHO WON THE GRAND PRIX DE ROME IN THE YEAR 1884.

SPECIAL SKETCH COMPETITION.

DURING the past year many draughtsmen have asked if there was not some way by which they could work at their homes and send or bring their studies to the atelier for criticism; so, in accordance with this demand, we shall, beginning with the month of September, 1900, inaugurate a special nine months' series of sketch problems, which are intended to be worked up spontaneously without criticism. One of these problems will be issued each month from September to June each year. Every effort will be made to maintain these programs of as lively an interest as can be, and the best solutions each month will be awarded prizes as stated below. Send your design and $1.00 for entrance into September competition, or send $8.00 and become entered for all nine of the competitions from September, 1900 to June, 1901. On October 1, we will remail it to you, postage prepaid, with a full and complete critical analysis of its faults and merits and whatever prize (if any) it has been judged worthy to receive. The names and addresses of prize winners will be announced each month.

For the month of September, 1900 there will be twenty-five cash prizes, aggregating $145.00, divided as follows: One first prize of $30.00; two prizes of $15.00 each; three prizes of $10.00 each; four prizes of $5.00 each; five prizes of $3.00 each; ten prizes of $2.00 each.

PROGRAM FOR SEPTEMBER.

A FOUNTAIN NICHE.

Preamble.— In a suburban district of a city of two hundred and fifty thousand people, it is proposed to cut a roadway around the base of a hill which extends in a rapid slope upward from the sea. A wall low enough not to obstruct the view shall separate the driveway from the sea, and the hillside of driveway shall be closed by a perpendicular wall of masonry. This wall is to be capped by a balustrade for the protection of a pedestrian's walk located on the hillside at that height. The total height of this wall including balustrade shall not exceed 26 ft. Thus a broad roadway for vehicles at the lower level nearest the sea, and a narrower way for pedestrians on a higher plane, will run parallel each to each and to the coast line.

Requirements.— The object of this problem is to design the hillside wall, and particularly a drinking fountain for horses in connection with this wall. In addition to the fulfilment of practical requirements, this fountain should be architecturally adorned; and since it is imperative that it shall occupy as little of the roadway as possible, the fountain shall be in the form of a grand niche, intersecting the hillside wall and extending beneath the pedestrian's walk. The horse trough, however, shall occupy space on the driveway. The water will be supplied by artificial means, and the fountain shall be entirely of masonry.

Drawings.— A plan, a section, and an elevation showing a portion of the wall on either side are required, all at the scale of $\frac{3}{16}$ in. equals 1 ft. The rendering will be left to the discretion of the designer, but the paper must be cut to the uniform size of 10 by 18 ins.

Send drawings unmounted to The Atelier Fitzwilliam on or before September 30, 1900.

Any deviation from the program of requirements will debar the candidate from the competition. No further instructions are needed or will be given.

GYMNASIUM AT HAMILTON FISH PARK, NEW YORK CITY.

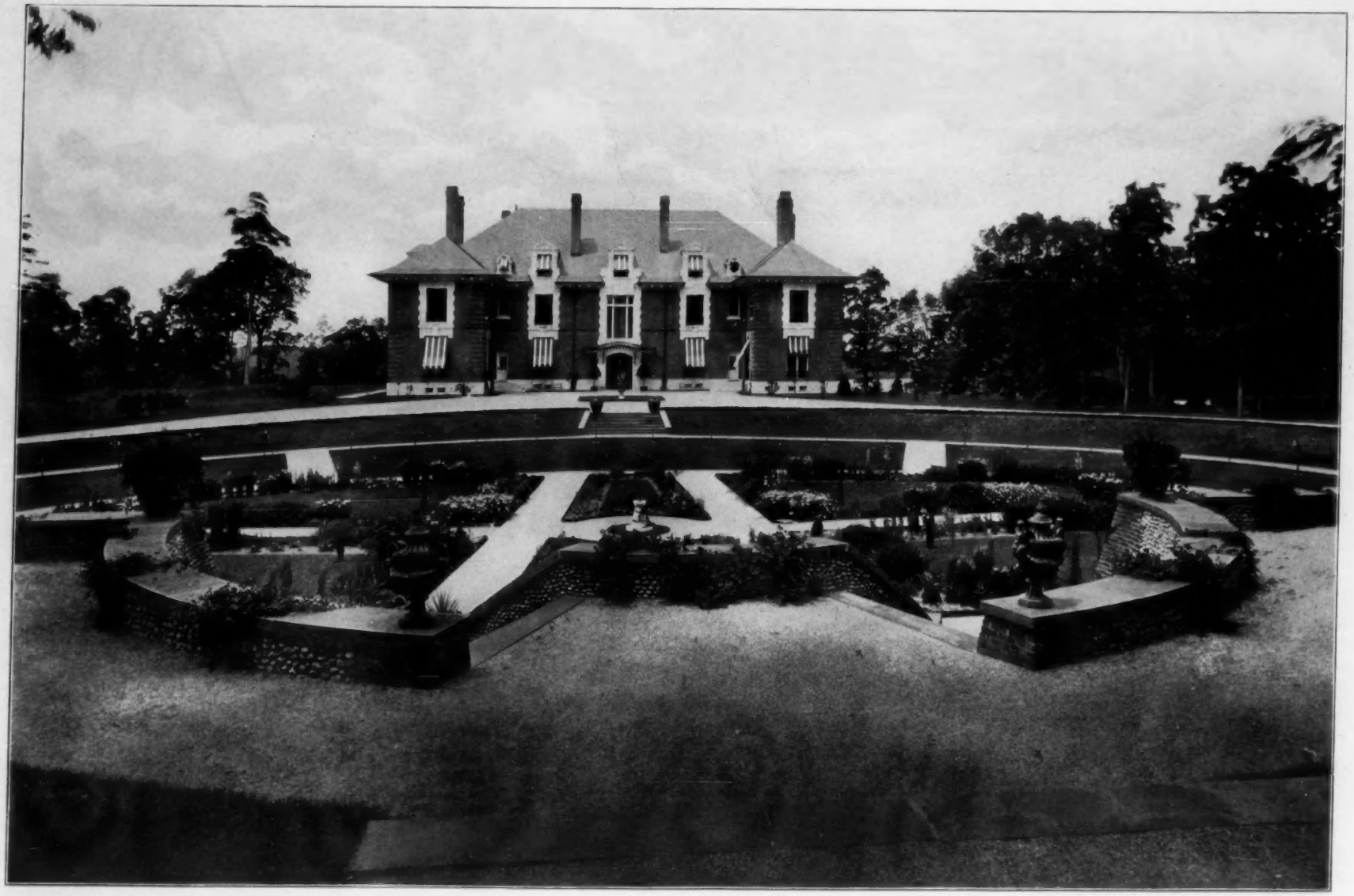
CARRERE & HASTINGS, ARCHITECTS.

BALLANTINE GATEWAY, NEWARK, N. J.

CARRERE & HASTINGS, ARCHITECTS.

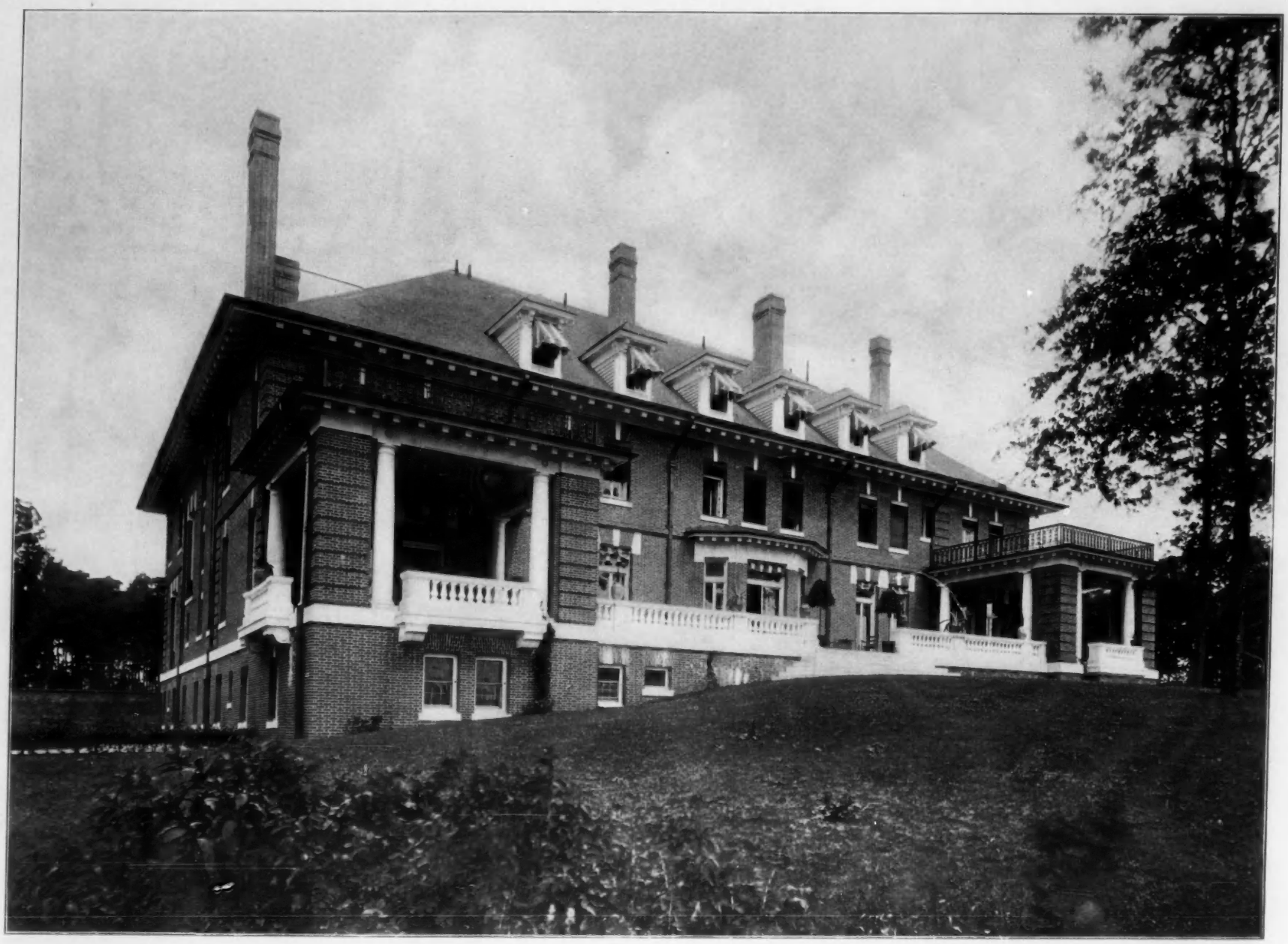
HOUSE, WEST 85TH STREET, NEW YORK CITY.

HOWARD & CAULDWELL, ARCHITECTS.



HOUSE AT COLD SPRINGS HARBOR, LONG ISLAND, N. Y.

CARRERE & HASTINGS, ARCHITECTS.

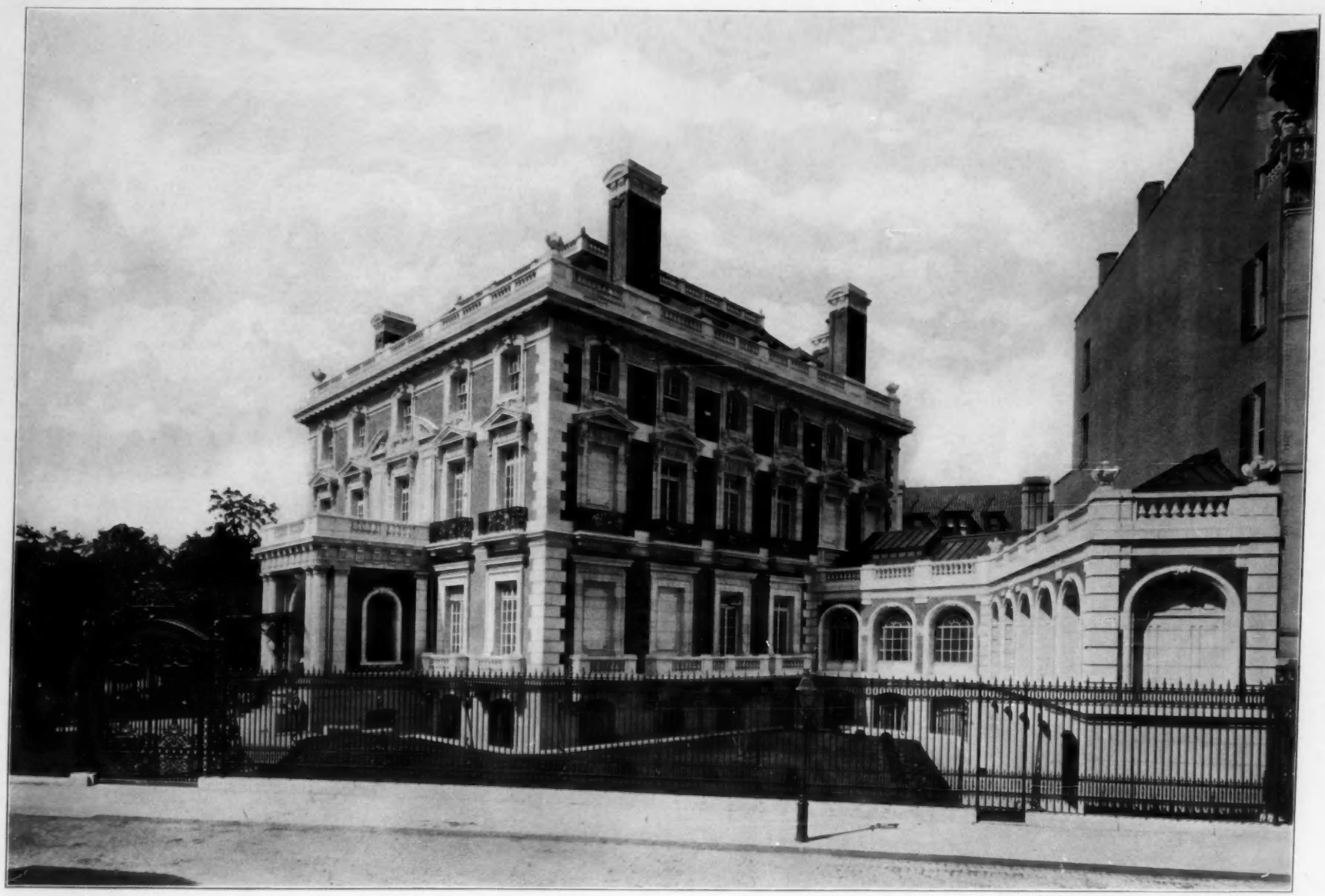


HOUSE AT COLD SPRINGS HARBOR, LONG ISLAND, N. Y.

CARRERE & HASTINGS, ARCHITECTS.

HOUSE, WASHINGTON AVENUE, CHICAGO, ILL.

POND & POND, ARCHITECTS.

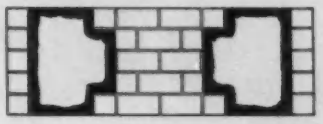


HOUSE, RIVER DRIVE, NEW YORK CITY.

ERNEST FLAGG, ARCHITECT.

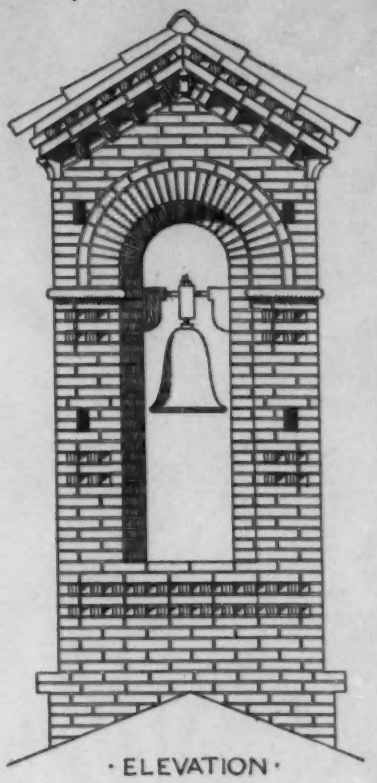
DETAILS OF ITALIAN BRICKWORK

MEASURED AND DRAWN BY WILL S. ALDRICH

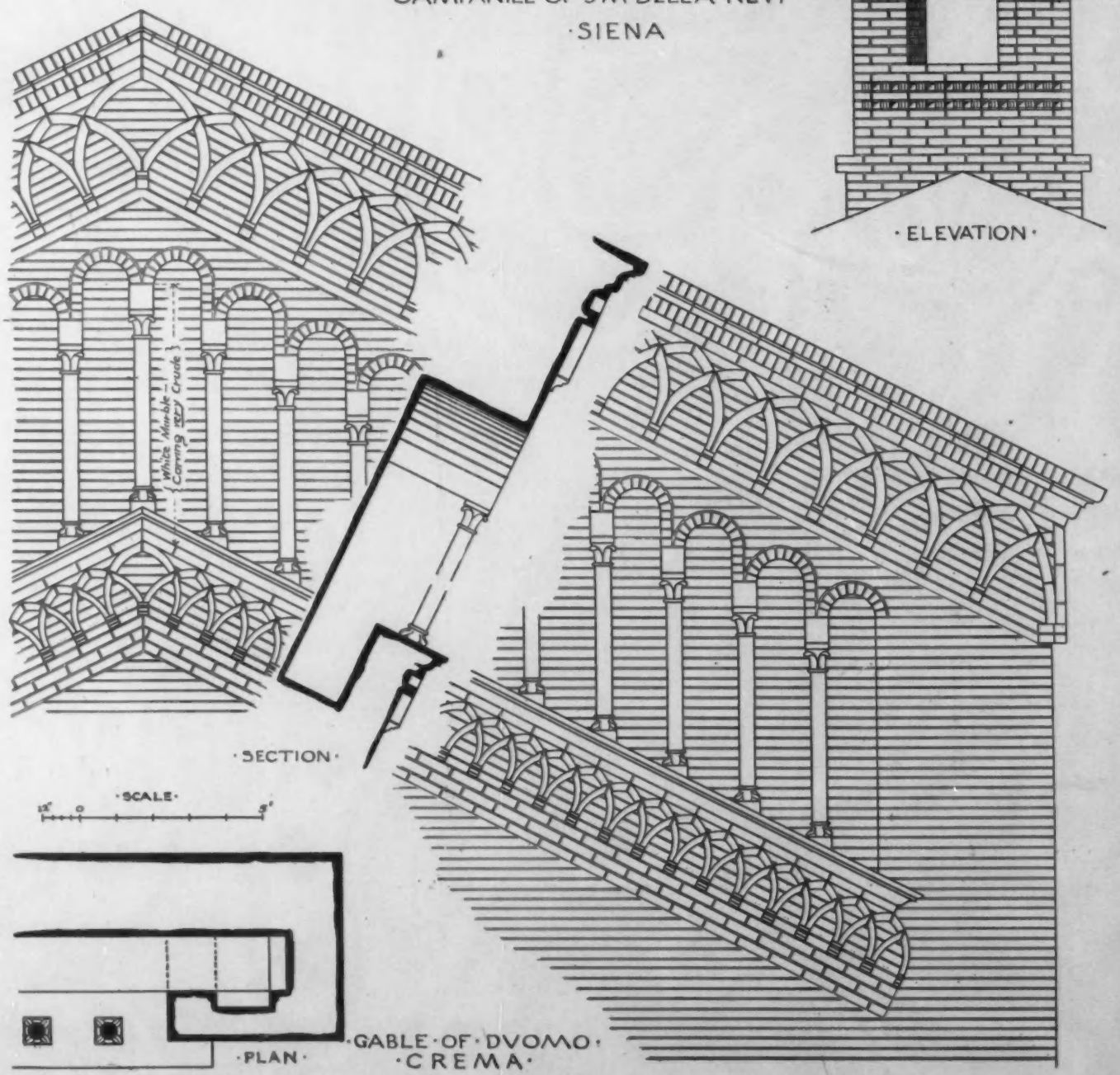


PLAN

CAMPANILE OF S.M. DELLA NEVI
SIENA



ELEVATION

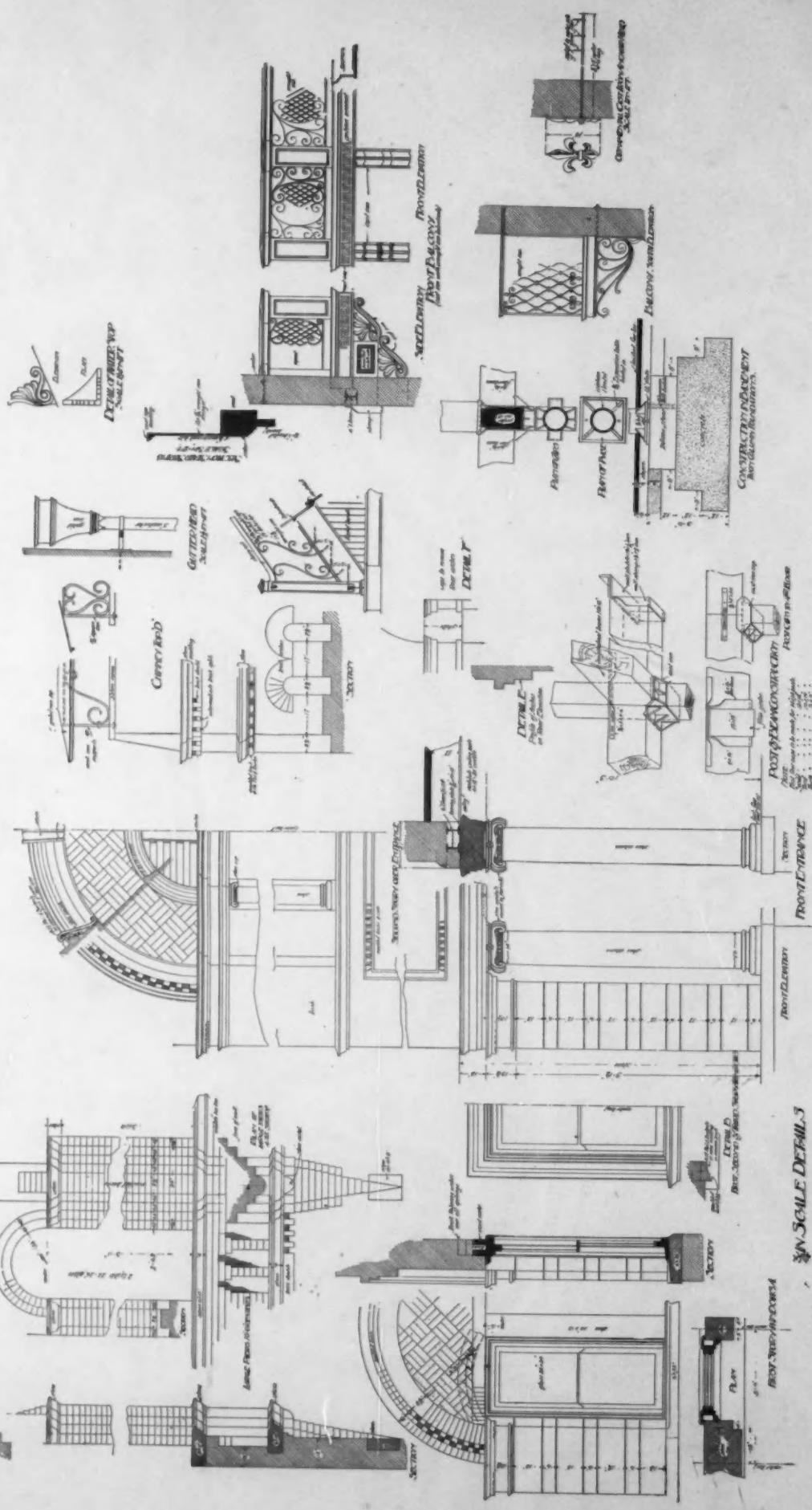


SECTION

SCALE

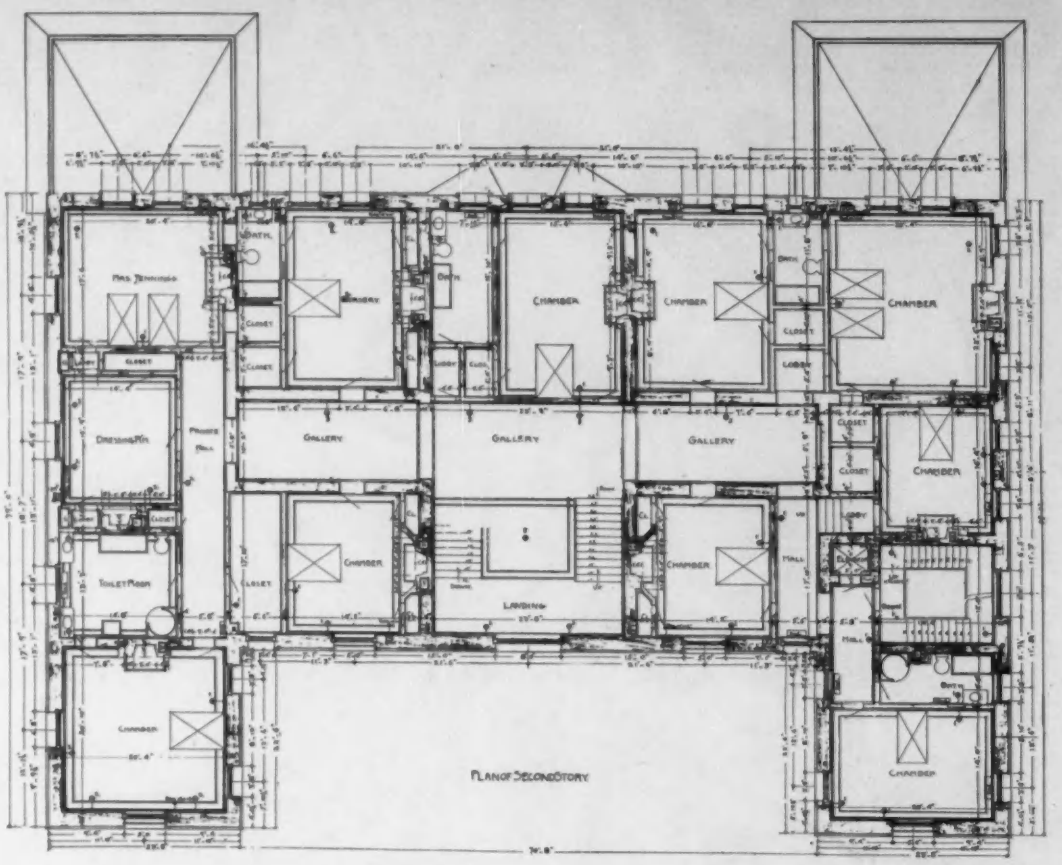
PLAN

GABLE OF DVOMO
CREMA



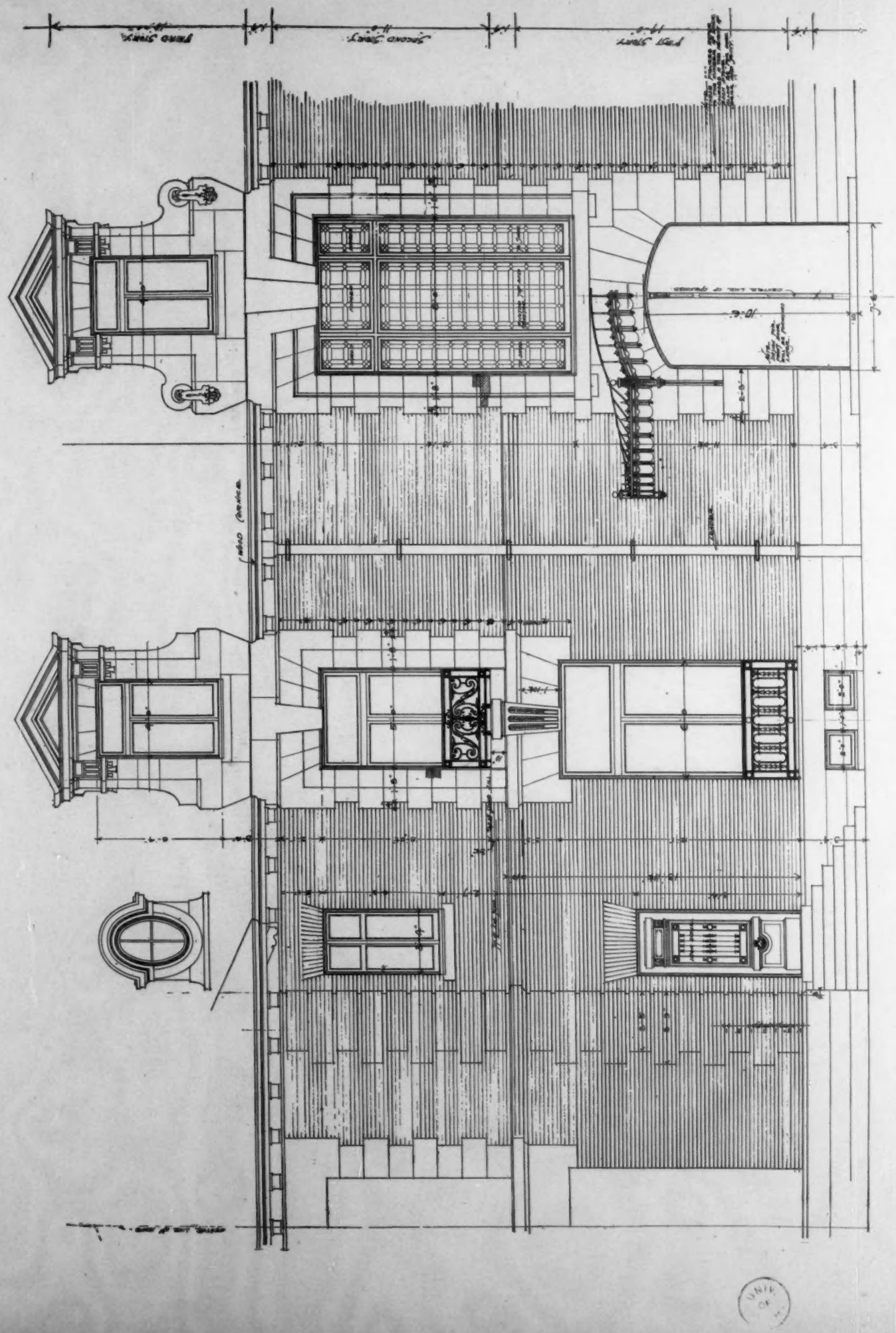
DETAILS, BUILDING FOR THE BALDWIN PIANO COMPANY.

ELZNER & ANDERSON, ARCHITECTS.



PLANS, HOUSE AT COLD SPRINGS HARBOR, LONG ISLAND, NEW YORK.

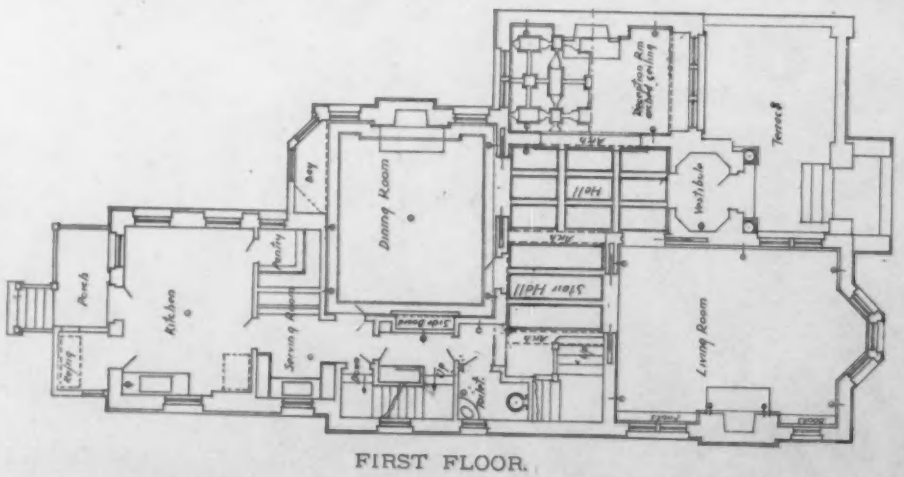
CARRERE & HASTINGS, ARCHITECTS.



DETAILS OF FRONT ELEVATION.

HOUSE AT COLD SPRINGS HARBOR, LONG ISLAND, NEW YORK.

CARRERE & HASTINGS, ARCHITECTS.



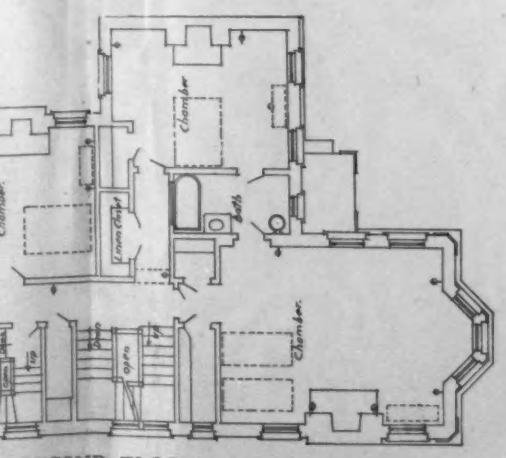
FIRST FLOOR.

SECOND FL

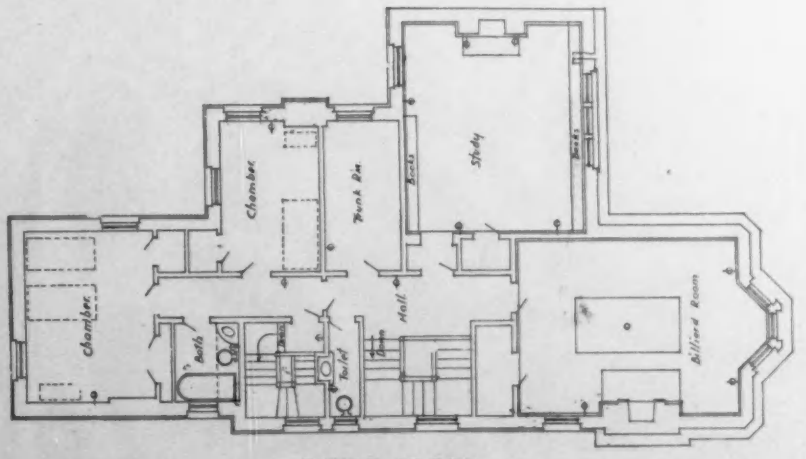
HOUSE, WASHINGTON AV

POND & POND, A

PLATES 59 and 62.



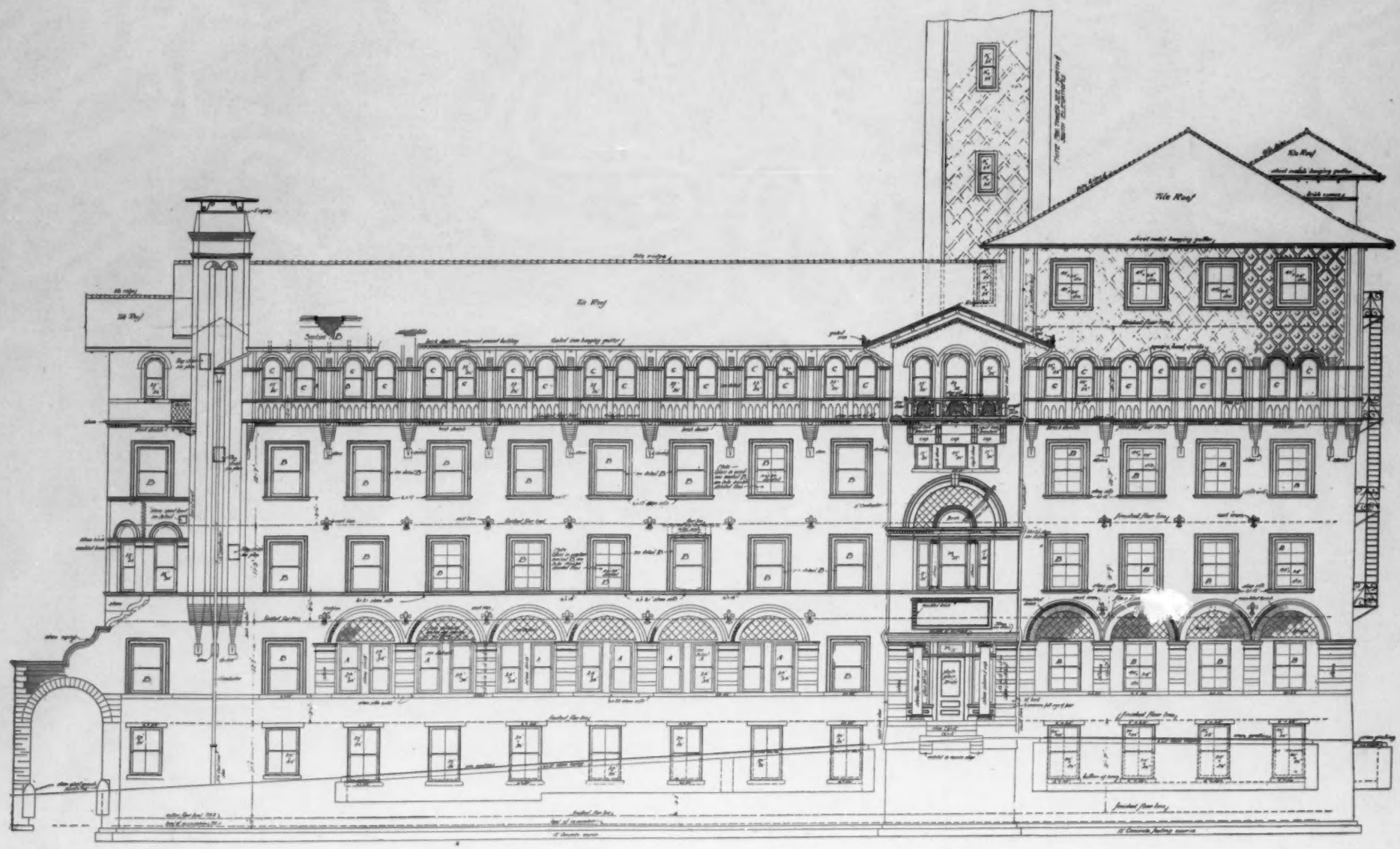
SECOND FLOOR.



THIRD FLOOR.

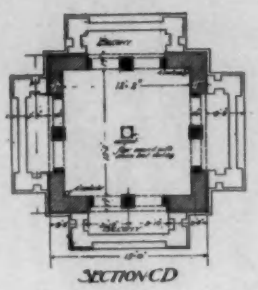
HINGTON AVENUE, CHICAGO, ILL.

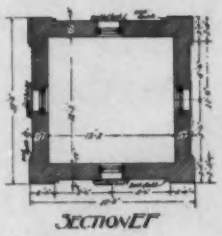
POND & POND, ARCHITECTS.

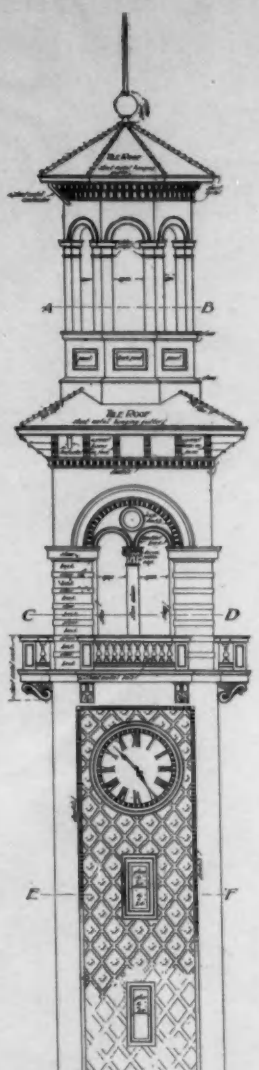


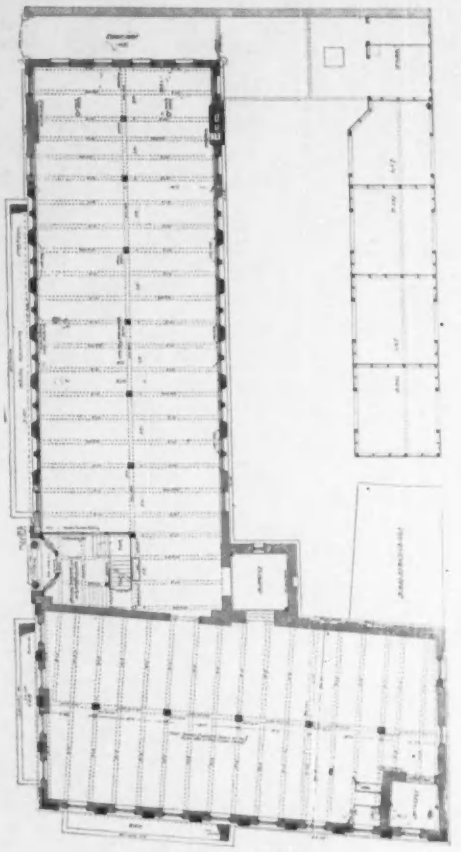
EAST ELEVATION, BUILDING FOR THE BALDWIN PIANO COMPANY.

ELZNER & ANDERSON, ARCHITECTS.









FIRST FLOOR.

SOUTH ELEVATION.

BUILDING FOR THE BALDWIN PIANO COMPANY.

ELZNER & ANDERSON, ARCHITECTS.